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 2a-c in methanol. ----------------------------------------------------------- S2
1H NMR Spectrum of 3a ------------------------------------------------------------- S3
13C NMR Spectrum of 3a ------------------------------------------------------------- S4
1H NMR Spectrum of 3b ------------------------------------------------------------- S5
13C NMR Spectrum of 3b ------------------------------------------------------------- S6
1H NMR Spectrum of 3c ------------------------------------------------------------- S7
13C NMR Spectrum of 3c ------------------------------------------------------------- S8
1H NMR Spectrum of 4a ------------------------------------------------------------- S9
13C NMR Spectrum of 4a ------------------------------------------------------------- S12
31P NMR Spectrum of 4a ------------------------------------------------------------- S11
1H NMR Spectrum of 4b ------------------------------------------------------------- S12
13C NMR Spectrum of 4b ------------------------------------------------------------- S13
31P NMR Spectrum of 4b ------------------------------------------------------------- S14
1H NMR Spectrum of 4c ------------------------------------------------------------- S15
13C NMR Spectrum of 4c ------------------------------------------------------------- S16
31P NMR Spectrum of 4c ------------------------------------------------------------- S17
Fig. S1  UV spectra of 2'-O-methyluridine (Um) and 2'-O-arylyridine derivatives 2a-e in methanol.
$^1$H NMR Spectrum of 2'-O-Phenyl-5'-O-(4,4'-dimethoxytrityl)uridine (3a)
$^{13}$C NMR Spectrum of 2'-O-Phenyl-5'-O-(4,4'-dimethoxytrityl)uridine (3a)
$^1$H NMR Spectrum of 2'-O-(1-Naphthyl)-5'-O-(4,4'-dimethoxytrityl)uridine (3b)
$^{13}$C NMR Spectrum of 2'-O-(1-Naphthyl)-5'-O-(4,4'-dimethoxytrityl)uridine (3b)
$^1$H NMR Spectrum of 2'-O-(2-Naphthyl)-5'-O-(4,4'-dimethoxytrityl)uridine (3c)
$^{13}$C NMR Spectrum of 2'-O-(2-Naphthyl)-5'-O-(4,4'-dimethoxytrityl)uridine (3c)
$^1$H NMR Spectrum of 2'-O-Phenyl-5'-O-(4,4'-dimethoxytrityl)uridine 3'-(N,N-diisopropyl)phosphoroamidite (4a)
$^{13}$C NMR Spectrum of 2'-O-phenyl-5'-O-(4', 4'-dimethoxytrityl)uridine 3'-(N, N-diisopropyl)phosphoramidite (4a)
$^{31}$P NMR Spectrum of 2'-O-Phenyl-5'-O-(4,4'-dimethoxytrityl)uridine 3'-(N,N-diisopropyl)phosphoroamidite (4a)
$^1$H NMR Spectrum of 2'-O-((1-naphthyl)-5'-O-(4,4'-dimethoxytrityl)uridine 3'-(-($N,N$-diisopropyl)phosphoroamidite (4b)
$^{13}$C NMR Spectrum of 2'-O-(1-naphthyl)-5'-O-(4, 4'-dimethoxytrityl)uridine 3'-(N, N-diisopropyl)phosphoramidite (4b)
$^{31}$P NMR Spectrum of $2'\text{-}O\text{-}(-(1\text{-}naphthyl)-5'\text{-}O\text{-}(4,4'\text{-}\text{dimethoxytrityl})\text{uridine}}$ $3'\text{-}(-(N,N\text{-diisopropyl})\text{phosphoroamidite} \ (4b)$
$^1$H NMR Spectrum of 2′-O-((2-naphthyl)-5′-O-(4,4′-dimethoxytrityl)uridine 3′-((N,N-diisopropyl)phosphoroamidite (4c)
$^{13}$C NMR Spectrum of 2'-O-(2-naphthyl)-5'-O-(4, 4'-dimethoxytrithyl)uridine 3'-(N, N-diisopropyl)phosphoramidite (4c)
$^{31}$P NMR Spectrum of 2'-O-(2-naphthyl)-5'-O-(4', 4'-dimethoxytrityl)uridine 3'-($N, N$-diisopropyl)phosphoramidite (4c)