



## Product Specifications

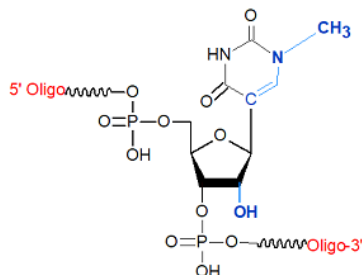
Custom Oligo Synthesis, antisense oligos, RNA oligos, chimeric oligos, Fluorescent dyes, Affinity Ligands, Spacers & Linkers, Duplex Stabilizers, Minor bases, labeled oligos, Molecular Beacons, siRNA, phosphonates Locked Nucleic Acids (LNA); 2'-5' linked Oligos

## Oligo Modifications

For research use only. Not for use in diagnostic procedures for clinical purposes.

### N1-methyl pseudoUridine (m1-psi rU)

Category	Structural Studies
Modification Code	m1-psi-rU
Reference Catalog Number	27-6532
5 Prime	Y
3 Prime	Y
Internal	Y
Molecular Weight(mw)	320.19



N1-methyl pseudoUridine (m1-psi rU)  
[27-6532-XX]

RNA methylation occurs in a large selection of RNA nucleosides and this post transcriptional modification of RNA, carried out by a variety of RNA methyltransferases, appears in a wide variety of RNA species - including tRNA, mRNA, miRNA and RNA viruses. Over 90 methylated nucleosides have been found in tRNA and these play many significant roles in tRNA structure. In addition, methylation appears to mark the tRNA as mature, preventing its degradation as well as directing localization within the cell. mRNA, modified with 1-methylpseudouridine (1-Me- $\Psi$ ) alone or in combination with 5-methylcytidine (5-Me-C), significantly increases protein expression in cells and mouse models. 1-Me- $\Psi$  is also a modified nucleobase that can greatly enhance the properties of mRNA by reducing immunogenicity and increasing stability.