

# PRODUCT INFORMATION



## 5'-O-DMTr-2'-O-TBDMS-N<sup>1</sup>-methylpseudouridine 3'-(cyanoethyl-N,N-diisopropyl)phosphoramidite

Item No. 44766

CAS Registry No.: 875302-45-7

Formal Name: 5-[5-O-[[bis(4-methoxyphenyl)phenylmethyl]-3-O-[[bis(1-methylethyl)amino](2-cyanoethoxy)phosphino]-2-O-[(1,1-dimethylethyl)dimethylsilyl]-β-D-ribofuranosyl]-1-methyl-2,4(1H,3H)-pyrimidinedione

MF: C<sub>46</sub>H<sub>63</sub>N<sub>4</sub>O<sub>9</sub>PSi

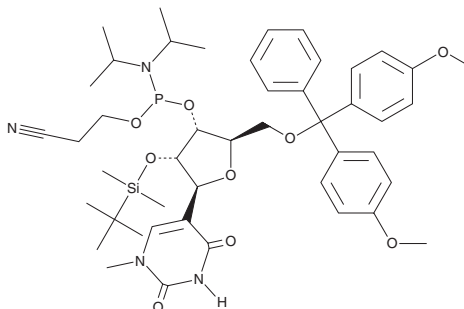
FW: 875.1

Purity: ≥98%

Supplied as: A solid

Storage: -20°C

Stability: ≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

### Laboratory Procedures

5'-O-DMTr-2'-O-TBDMS-N<sup>1</sup>-methylpseudouridine 3'-(cyanoethyl-N,N-diisopropyl)phosphoramidite is supplied as a solid. A stock solution may be made by dissolving the 5'-O-DMTr-2'-O-TBDMS-N<sup>1</sup>-methylpseudouridine 3'-(cyanoethyl-N,N-diisopropyl)phosphoramidite in the solvent of choice, which should be purged with an inert gas. 5'-O-DMTr-2'-O-TBDMS-N<sup>1</sup>-methylpseudouridine 3'-(cyanoethyl-N,N-diisopropyl)phosphoramidite is soluble (≥10 mg/ml) in DMSO. 5'-O-DMTr-2'-O-TBDMS-N<sup>1</sup>-methylpseudouridine 3'-(cyanoethyl-N,N-diisopropyl)phosphoramidite is sparingly soluble (1-10 mg/ml) in ethanol.

### Description

5'-O-DMTr-2'-O-TBDMS-N<sup>1</sup>-methylpseudouridine 3'-(cyanoethyl-N,N-diisopropyl)phosphoramidite is a nucleoside building block that has been used in the synthesis of oligonucleotides.<sup>1</sup>

### Reference

1. Nievergelt, P., Berliat, F., McAuley, K.E., *et al.* RNA oligomers at atomic resolution containing 1-methylpseudouridine, an essential building block of mRNA vaccines. *ChemMedChem* **19**(7), e202300600 (2024).

#### WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

#### SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

#### WARRANTY AND LIMITATION OF REMEDY

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#### CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD  
ANN ARBOR, MI 48108 · USA

PHONE: [800] 364-9897

[734] 971-3335

FAX: [734] 971-3640

CUSTSERV@CAYMANCHEM.COM

WWW.CAYMANCHEM.COM