

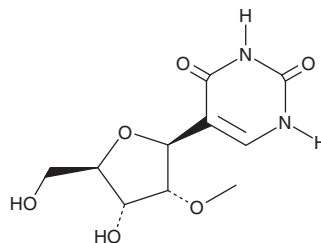
PRODUCT INFORMATION



2'-O-Methylpseudouridine

Item No. 46554

CAS Registry No.: 2140-68-3
Formal Name: 5-(2-O-methyl-β-D-ribofuranosyl)-
2,4(1H,3H)-pyrimidinedione
MF: C₁₀H₁₄N₂O₆
FW: 258.2
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

2'-O-Methylpseudouridine is supplied as a solid. A stock solution may be made by dissolving the 2'-O-methylpseudouridine in the solvent of choice, which should be purged with an inert gas. 2'-O-Methylpseudouridine is soluble (≥10 mg/ml) in DMSO.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. Organic solvent-free aqueous solutions of 2'-O-methylpseudouridine can be prepared by directly dissolving the solid in aqueous buffers. 2'-O-Methylpseudouridine is soluble (≥10 mg/ml) in PBS (pH 7.2). We do not recommend storing the aqueous solution for more than one day.

Description

2'-O-Methylpseudouridine is a modified nucleoside that has been found in prokaryotic tRNA and human rRNA.^{1,2} It has been used in the synthesis of oligonucleotides.³

References

1. Edmonds, C.G., Crain, P.F., Gupta, R., *et al.* Posttranscriptional modification of tRNA in thermophilic archaea (Archaeobacteria). *J. Bacteriol.* **173**(10), 3138-3148 (1991).
2. Taoka, M., Nobe, Y., Yamaki, Y., *et al.* Landscape of the complete RNA chemical modifications in the human 80S ribosome. *Nucleic Acids Res.* **46**(18), 9289-9298 (2018).
3. Ross, B.S., Vasquez, G., Manalili, S., *et al.* Synthesis and incorporation of 2'-O-methyl-pseudouridine into oligonucleotides. *Nucleosides Nucleotides* **16** (7-9), 1547-1549 (1997).

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.

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