

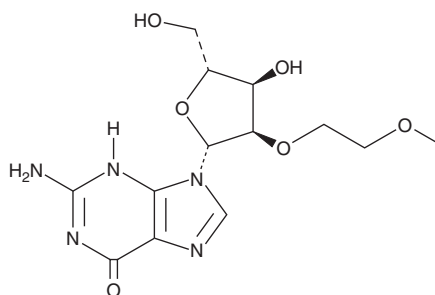
PRODUCT INFORMATION



2'-O-(2-Methoxyethyl)guanosine

Item No. 40444

CAS Registry No.: 473278-54-5
Formal Name: 2-amino-9-((2R,3R,4R,5R)-4-hydroxy-5-(hydroxymethyl)-3-(2-methoxyethoxy)tetrahydrofuran-2-yl)-3,9-dihydro-6H-purin-6-one
MF: C₁₃H₁₉N₅O₆
FW: 341.3
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-(2-Methoxyethyl)guanosine is supplied as a solid. A stock solution may be made by dissolving the 2'-O-(2-methoxyethyl)guanosine in the solvent of choice, which should be purged with an inert gas. 2'-O-(2-Methoxyethyl)guanosine is sparingly soluble (1-10 mg/ml) in DMSO and slightly soluble (0.1-1 mg/ml) in acetonitrile and water.

2'-O-(2-Methoxyethyl)guanosine is slightly soluble in aqueous solutions. To enhance aqueous solubility, dilute the organic solvent solution into aqueous buffers or isotonic saline. If performing biological experiments, ensure the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. We do not recommend storing the aqueous solution for more than one day.

Description

2'-O-(2-Methoxyethyl)guanosine is a nucleoside and derivative of the purine nucleoside guanosine (Item No. 27702). Enzymes in the nucleotide salvage pathway, including deoxycytidine kinase (dCK) and thymidine kinase 1 (TK1), exhibit poor reactivity towards 2'-O-(2-methoxyethyl)guanosine, reducing the likelihood of 2'-O-(2-methoxyethyl)guanosine conversion to its monophosphate form and incorporation into cellular RNA or DNA.¹

Reference

1. Saleh, A.F., Bachman, M., Priestley, C.C., *et al.* 2'-O-(2-Methoxyethyl) nucleosides are not phosphorylated or incorporated into the genome of human lymphoblastoid TK6 cells. *Toxicol. Sci.* **163**(1), 70-78 (2018).

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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