

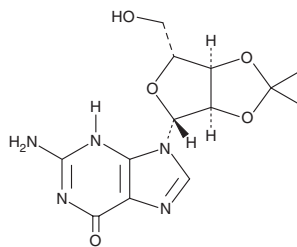
PRODUCT INFORMATION



2',3'-O-Isopropylideneguanosine

Item No. 30476

CAS Registry No.: 362-76-5
Formal Name: 2',3'-O-(1-methylethylidene)-guanosine
MF: $C_{13}H_{17}N_5O_5$
FW: 323.3
Purity: $\geq 98\%$
UV/Vis.: λ_{max} : 255 nm
Supplied as: A crystalline 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',3'-O-Isopropylideneguanosine is supplied as a crystalline solid. A stock solution may be made by dissolving the 2',3'-O-isopropylideneguanosine in the solvent of choice, which should be purged with an inert gas. 2',3'-O-Isopropylideneguanosine is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of 2',3'-O-isopropylideneguanosine in these solvents is approximately 10 mg/ml.

2',3'-O-Isopropylideneguanosine is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, 2',3'-O-isopropylideneguanosine should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. 2',3'-O-Isopropylideneguanosine has a solubility of approximately 0.2 mg/ml in a 1:4 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

2',3'-O-Isopropylideneguanosine is an alkylated guanosine building block.^{1,2} It has been used in the synthesis of ordered honeycomb microporous films and mRNA cap analogs.

References

1. Gao, Y.-F., Huang, Y.-J., Xu, S.-Y., *et al.* Ordered honeycomb microporous films from self-assembly of alkylated guanosine derivatives. *Langmuir* **27**(6), 2958-2964 (2011).
2. Kore, A.R., Shanmugasundaram, M., and Vlassov, A.V. Synthesis and application of a new 2',3'-isopropylidene guanosine substituted cap analog. *Bioorg. Med. Chem. Lett.* **18**(17), 4828-4832 (2008).

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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