

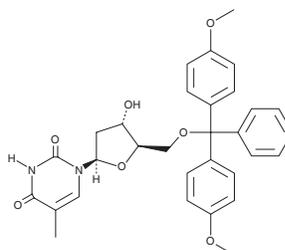
PRODUCT INFORMATION



5'-O-(4,4'-Dimethoxytrityl)thymidine

Item No. 30802

CAS Registry No.: 40615-39-2
Formal Name: 5'-O-[bis(4-methoxyphenyl)phenylmethyl]-thymidine
Synonyms: DMT-T, DMTrT
MF: C₃₁H₃₂N₂O₇
FW: 544.6
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-(4,4'-Dimethoxytrityl)thymidine is supplied as a solid. A stock solution may be made by dissolving the 5'-O-(4,4'-dimethoxytrityl)thymidine in the solvent of choice, which should be purged with an inert gas. 5'-O-(4,4'-Dimethoxytrityl)thymidine is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of 5'-O-(4,4'-dimethoxytrityl)thymidine in these solvents is approximately 30 mg/ml.

Description

5'-O-(4,4'-Dimethoxytrityl)thymidine is a derivative of thymidine containing a dimethoxytrityl protecting group.¹ It has been used as a precursor in the synthesis of oligo-2'-deoxyribonucleotides and phosphoramidate derivatives.²⁻⁴

References

1. Shelkovnikov, V.V., Loskutov, V.A., Vasil'ev, E.V., *et al.* New acid photogenerators based on thioxanthen-9-one sulfonium derivatives for detritylation in the oligonucleotide synthesis. *Russ. Chem. Bull.* **60(3)**, 561-569 (2011).
2. Kungurtsev, V., Laakkonen, J., Molina, A.G., *et al.* Solution-phase synthesis of short oligo-2'-deoxyribonucleotides by using clustered nucleosides as a soluble support. *Eur. J. Org. Chem.* **29** 6687-6693 (2013).
3. Lin, C., Fu, H., Tu, G., *et al.* Synthesis of dinucleotide thiophosphoramidates as anti-HIV new prodrugs. *Cheminform* **35(13)**, 1989-1994 (2003).
4. Kungurtsev, V., Lönnberg, H., and Virta, P. Synthesis of protected 2'-O-deoxyribonucleotides on a precipitative soluble support: A useful procedure for the preparation of trimer phosphoramidites. *RSC Adv.* **6(107)**, 105428-105432 (2016).

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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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