

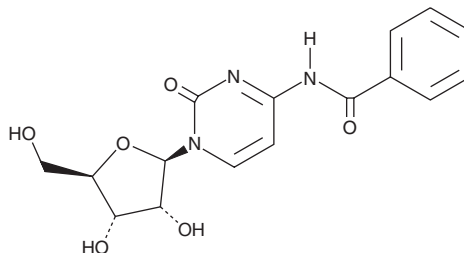
PRODUCT INFORMATION



N⁴-benzoyl-Cytidine

Item No. 35698

CAS Registry No.: 13089-48-0
Formal Name: N-benzoyl-cytidine
Synonym: NSC 242979
MF: C₁₆H₁₇N₃O₆
FW: 347.3
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

N⁴-benzoyl-Cytidine is supplied as a solid. A stock solution may be made by dissolving the N⁴-benzoyl-cytidine in the solvent of choice, which should be purged with an inert gas. N⁴-benzoyl-Cytidine is soluble in DMSO.

Description

N⁴-benzoyl-Cytidine is a benzyolated derivative of the pyrimidine nucleoside cytidine (Item No. 29602).¹ It is a substrate of uridine-cytidine kinase 1 (UCK1) and UCK2. N⁴-benzoyl-Cytidine also has been used in the synthesis of 2'-OH protecting groups for solid-phase RNA synthesis, as well as synthetic oligonucleotides for UV light-induced and targeted gene silencing in zebrafish embryos.^{2,3}

References

1. Van Rompay, A.R., Norda, A., Lindén, K., *et al.* Phosphorylation of uridine and cytidine nucleoside analogs by two human uridine-cytidine kinases. *Mol. Pharmacol.* **59(5)**, 1181-1186 (2001).
2. Semenyuk, A., Földesi, A., Johansson, T., *et al.* Synthesis of RNA Using 2'-O-DTM Protection. *J. Am. Chem. Soc.* **128(38)**, 12356-12357 (2006).
3. Shestopalov, I.A., Sinha, S., and Chen, J.K. Light-controlled gene silencing in zebrafish embryos. *Nat. Chem. Biol.* **3(10)**, 650-651 (2007).

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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