

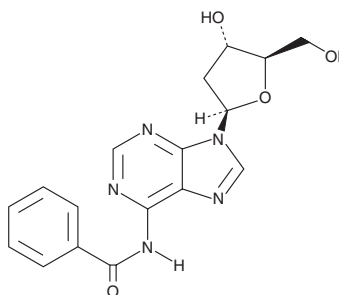
PRODUCT INFORMATION



N⁶-benzoyl-2'-Deoxyadenosine

Item No. 30262

CAS Registry No.: 4546-72-9
Formal Name: N-benzoyl-2'-deoxy-adenosine
Synonyms: N-Benzoyldeoxyadenosine,
6-N-Benzoyldeoxyadenosine
MF: C₁₇H₁₇N₅O₄
FW: 355.4
Purity: ≥95%
UV/Vis.: λ_{max}: 281 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

N⁶-benzoyl-2'-Deoxyadenosine is supplied as a crystalline solid. A stock solution may be made by dissolving the N⁶-benzoyl-2'-deoxyadenosine in the solvent of choice, which should be purged with an inert gas. N⁶-benzoyl-2'-Deoxyadenosine is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of N⁶-benzoyl-2'-deoxyadenosine in these solvents is approximately 1, 15, and 30 mg/ml, respectively.

N⁶-benzoyl-2'-Deoxyadenosine is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, N⁶-benzoyl-2'-deoxyadenosine should first be dissolved in DMF and then diluted with the aqueous buffer of choice. N⁶-benzoyl-2'-Deoxyadenosine has a solubility of approximately 0.14 mg/ml in a 1:6 solution of DMF:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

N⁶-benzoyl-2'-Deoxyadenosine is a nucleoside building block.^{1,2} It is amino-protected and has been used in the synthesis of various oligonucleotides.

References

1. Mishra, R.K. and Misra, K. Improved synthesis of oligodeoxyribonucleotide using 3-methoxy-4-phenoxybenzoyl group for amino protection. *Nucleic Acids Res.* **14(15)**, 6197-6213 (1986).
2. Garcia, J., Fernández, S., Ferrero, M., *et al.* Building blocks for the solution phase synthesis of oligonucleotides: Regioselective hydrolysis of 3',5'-Di-O-levulinyl nucleosides using an enzymatic approach. *J. Org. Chem.* **67(13)**, 4513-4519 (2002).

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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