

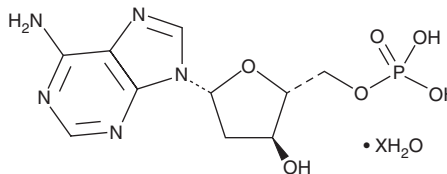
PRODUCT INFORMATION



2'-Deoxyadenosine-5'-monophosphate (hydrate)

Item No. 16218

Formal Name: 2'-deoxy-5'-adenylic acid, hydrate
Synonyms: dAMP, 2'-Deoxy-5'-AMP, NSC 77680, NSC 82625
MF: C₁₀H₁₄N₅O₆P • XH₂O
FW: 331.2
Purity: ≥95%
UV/Vis.: λ_{max}: 210, 260 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'-Deoxyadenosine-5'-monophosphate (dAMP) (hydrate) is supplied as a crystalline solid. Aqueous solutions of dAMP (hydrate) can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of dAMP (hydrate) in PBS, pH 7.2, is approximately 1 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

dAMP is a derivative of the nucleic acid, AMP, in which the hydroxyl group on the 2' carbon of the pentose has been reduced to a hydrogen atom. It has been used in the synthesis of novel photoaffinity labels for incorporation into DNA and to study adenosine-based interactions during DNA synthesis and DNA damage.¹⁻³

References

1. Zofall, M. and Bartholomew, B. Two novel dATP analogs for DNA photoaffinity labeling. *Nucleic Acids Res.* **28(21)**, 4382-4390 (2000).
2. Li, Y.-M., Han, Z.-H., Jiang, S.-H., *et al.* Fast repairing of oxidized OH radical adducts of dAMP and dGMP by phenylpropanoid glycosides from *Scrophularia ningpoensis* Hemsl. *Acta. Pharmacol. Sin.* **21(12)**, 1125-1128 (2000).
3. Duarte, V., Muller, J.G., and Burrows, C.J. Insertion of dGMP and dAMP during *in vitro* DNA synthesis opposite an oxidized form of 7,8-dihydro-8-oxoguanine. *Nucleic Acids Res.* **27(2)**, 496-502 (1999).

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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