

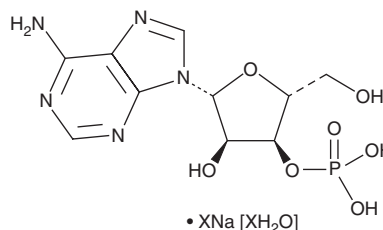
PRODUCT INFORMATION



Adenosine 3'-monophosphate (sodium salt hydrate)

Item No. 26256

Formal Name: 3'-adenylic acid, sodium salt, hydrate
Synonym: 3'-AMP
MF: C₁₀H₁₄N₅O₇P • XNa [XH₂O]
FW: 347.2
Purity: ≥98%
UV/Vis.: λ_{max}: 259 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

Adenosine 3'-monophosphate (sodium salt hydrate) is supplied as a crystalline solid. Aqueous solutions of adenosine 3'-monophosphate (sodium salt hydrate) can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of adenosine 3'-monophosphate (sodium salt hydrate) in PBS, pH 7.2, is approximately 10 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

Adenosine 3'-monophosphate is a nucleotide and metabolite formed via hydrolysis of 2',3'-cAMP by metal-dependent phosphodiesterases.¹ It reduces proliferation of rat preglomerular vascular smooth muscle cells (PGVSMCs) and glomerular mesangial cells (GMCs) in a concentration-dependent manner, an effect that is abolished by the adenosine A_{2B} receptor antagonist MRS1754.² Adenosine 3'-monophosphate is also a metabolic intermediate in the biosynthesis of adenosine (Item No. 21232).

References

1. Rao, F., Yaning, Q., Murugan, E., *et al.* 20,30-cAMP hydrolysis by metal-dependent phosphodiesterases containing DHH, EAL, and HD domains is non-specific: Implications for PDE screening. *Biochem. Biophys. Res. Commun.* **398**(3), 500-505 (2010).
2. Jackson, E.K., Gillespie, D.G., and Dubey, R.K. 2'-AMP and 3'-AMP inhibit proliferation of preglomerular vascular smooth muscle cells and glomerular mesangial cells via A_{2B} receptors. *J. Pharmacol. Exp. Ther.* **337**(2), 444-450 (2011).

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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