

## Adenosine 3'-monophosphate (sodium salt hydrate)

### Chemical Properties

CAS No. :

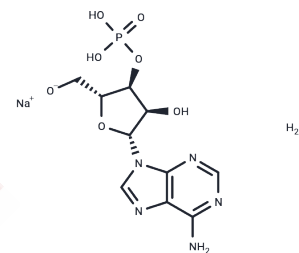
Formula: C10H15N5NaO8P

Molecular Weight: 387.22

Store at low temperature

Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year

Actual storage temperature shall be subject to the COA.



### Biological Description

Description	Adenosine 3'-monophosphate (sodium salt hydrate) (3'-AMP) is a nucleotide and cAMP-generating agonist that elevates cAMP levels in NG108-15 cells. Adenosine 3'-monophosphate is converted to adenosine via the A2B receptor, thereby inhibiting vascular smooth muscle cell (VSMC) proliferation.
Targets(IC50)	cAMP
In vitro	Adenosine 3'-monophosphate (sodium salt hydrate) (0, 3, 10 μmol/L, once every 24 hours for 4 consecutive days) significantly inhibited the proliferation of Homo sapiens and rat aortic vascular smooth muscle cells (AVSMCs). [3]

### Solubility Information

Solubility	PBS (pH 7.2): 8 mg/mL (20.66 mM), Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
------------	--

### Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.5825 mL	12.9126 mL	25.8251 mL
5 mM	0.5165 mL	2.5825 mL	5.165 mL
10 mM	0.2583 mL	1.2913 mL	2.5825 mL
50 mM	0.0517 mL	0.2583 mL	0.5165 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

### Reference

Rao F, et al. 2',3'-cAMP hydrolysis by metal-dependent phosphodiesterases containing DHH, EAL, and HD domains is non-specific: Implications for PDE screening. *Biochem Biophys Res Commun.* 2010 Jul 30;398(3):500-5.

Jackson, E.K., et al. 2'-AMP and 3'-AMP inhibit proliferation of preglomerular vascular smooth muscle cells and glomerular mesangial cells via A2B receptors. *J. Pharmacol. Exp. Ther.* 337(2):444-450(2011)

Jackson, E. K., et al., (2011). 2',3'-cAMP, 3'-AMP, and 2'-AMP inhibit human aortic and coronary vascular smooth muscle cell proliferation via A2B receptors. *American journal of physiology. Heart and circulatory physiology*, 301(2), H391-H401.

**Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins**

This product is for Research Use Only · Not for Human or Veterinary or Therapeutic Use

Tel:781-999-4286 E\_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481