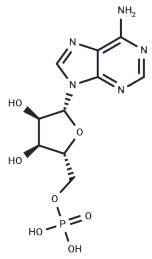
Data Sheet (Cat.No.T2133)

TargetMol

Adenosine monophosphate

Chemical Properties



CAS No. : 61-19-8

Formula: C10H14N5O7P

Molecular Weight: 347.22

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 monophosphate (AMP) is a purine ribonucleoside 5'-monophosphates and a key cellular metabolite in signal transduction and regulation of energy homeostasis.It has a role as an EC 3.1.3.11 (fructose-bisphosphatase) inhibitor, an EC 3.1.3.1 (alkaline phosphatase) inhibitor and an adenosine A1 receptor agonist.
Targets(IC50)	Endogenous Metabolite,AMPK,Adenosine Receptor,HSV

Solubility Information

Solubility	DMSO: 160 mg/mL (460.8 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+40% PEG300+5% Tween 80+45% Saline: 1 mg/mL (2.88 mM),Sonication is recommended. *Please add the solvents sequentially, clarifying the solution as much as possible before adding the next one. Dissolve by heating and/or sonication if necessary. Working solution is recommended to be prepared and used immediately. The formulation provided above is for reference purposes only. In vivo formulations may vary and should be modified based on specific experimental conditions.*

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.880 mL	14.4001 mL	28.8002 mL
5 mM	0.576 mL	2.880 mL	5.760 mL
10 mM	0.288 mL	1.440 mL	2.880 mL
50 mM	0.0576 mL	0.288 mL	0.576 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

Richter EA, et al. Ugeskr Laeger. 2006 Feb 27;168(9):896-900.
Zhang H, Liang B, Sang X, et al.Discovery of Potential Inhibitors of SARS-CoV-2 Main Protease by a Transfer Learning Method.Viruses.2023, 15(4): 891.
Li H, Wang M, Qu K, et al.MP Allosterically Activates AMPK to Enhance ABCA1 Stability by Retarding the Calpain-Mediated Degradation Pathway.International Journal of Molecular Sciences.2023, 24(24): 17280.