Data Sheet (Cat.No.T5079)

TargetMol

Adenosine 5'-diphosphate sodium salt

Chemical Properties

CAS No. :	20398-34-9
Formula:	C10H14N5NaO10P2
Molecular Weight:	449.183
Storage:	Store at low temperature Pure form: -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 5'-diphosphate sodium salt (ADP sodium salt) is an adenine nucleotide that is phosphorylated into ATP by ATPase. This phosphorylation is a key part of cellular homeostatis as it allows for energy storage and is involved in nucleic acid metabolism. ADP affects platelet activation through its interaction with ADP receptors P2Y1, P2Y12 and P2X1. Upon its conversion to adenosine by ecto-ADPases, platelet activation is inhibited via adenosine receptors.
Targets(IC50)	Endogenous Metabolite

Solubility Information

Solubility	DMSO: 4.35 mg/mL (9.68 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+90% Saline: 0.43 mg/mL (0.96 mM),Solution. *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	2.2263 mL	11.1314 mL	22.2628 mL
5 mM	0.4453 mL	2.2263 mL	4.4526 mL
10 mM	0.2226 mL	1.1131 mL	2.2263 mL
50 mM	0.0445 mL	0.2226 mL	0.4453 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

de Almeida-Pereira, L., Magalhães, C.F., Repossi, M.G. et al. Mol Neurobiol (2017) 54: 5142. https://doi.org/10.1007/s12035-016-0059-0