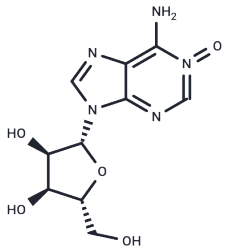
Data Sheet (Cat.No.T23636)

TargetMol

Adenosine N1-oxide

Chemical Properties



CAS No. : 146-92-9

Formula: C10H13N5O5

Molecular Weight: 283.24

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 N1-oxide (1-Oxoadenosine), which is found in royal jelly, inhibited the secretion of inflammatory mediators by activated macrophages and reduced lethality in lipopolysaccharide (LPS)-induced endotoxin shock.
Targets(IC50)	Immunology/Inflammation related,PI3K

Solubility Information

Solubility	DMSO: 60 mg/mL (211.83 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: 2.5 mg/mL (8.83 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	3.5306 mL	17.6529 mL	35.3057 mL
5 mM	0.7061 mL	3.5306 mL	7.0611 mL
10 mM	0.3531 mL	1.7653 mL	3.5306 mL
50 mM	0.0706 mL	0.3531 mL	0.7061 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

Kohno K, Ohashi E, et al. Anti-inflammatory effects of adenosine N1-oxide. J Inflamm (Lond). 2015 Jan 20;12(1):2.
Ohashi E, Kohno K, Arai N, Harashima A, Ariyasu T, Ushio S. Adenosine N1-Oxide Exerts Anti-inflammatory Effects through the PI3K/Akt/GSK-3β Signaling Pathway and Promotes Osteogenic and Adipocyte Differentiation. Biol Pharm Bull. 2019;42(6):968-976.
Deng L, Dai P, Ding W, Granstein RD, Shuman S. Vaccinia virus infection attenuates innate immune responses and antigen presentation by epidermal dendritic cells. J Virol. 2006 Oct;80(20):9977-87. PubMed PMID: 17005676; PubMed Central PMCID: PMC1617288.
Smee DF, Sidwell RW. A review of compounds exhibiting anti-orthopoxvirus activity in animal models. Antiviral Res. 2003 Jan;57(1-2):41-52. Review. PubMed PMID: 12615302.