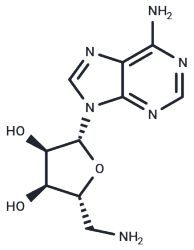
Data Sheet (Cat.No.T21017)

TargetMol

5'-Amino-5'-deoxyadenosine

Chemical Properties



CAS No. : 14365-44-7

Formula: C10H14N6O3

Molecular Weight: 266.26

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	5'-Amino-5'-deoxyadenosine (NH2dAdo) is an adenosine kinase inhibitor targeting malignant tumors of the inert lymphatic system with antitumor and anticancer effects. Its mechanism is mediated by the inhibition of DNA synthesis and induction of apoptosis.
Targets(IC50)	Apoptosis,Nucleoside Antimetabolite/Analog,Adenosine Receptor

Solubility Information

Solubility	DMSO: 50 mg/mL (187.79 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 mg/mL (7.51 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	3.7557 mL	18.7786 mL	37.5573 mL
5 mM	0.7511 mL	3.7557 mL	7.5115 mL
10 mM	0.3756 mL	1.8779 mL	3.7557 mL
50 mM	0.0751 mL	0.3756 mL	0.7511 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

Robak T, Robak P. Purine nucleoside analogs in the treatment of rarer chronic lymphoid leukemias. Curr Pharm Des. 2012;18(23):3373-88.

Wiesner JB, Ugarkar BG, Castellino AJ, Barankiewicz J, Dumas DP, Gruber HE, Foster AC, Erion MD. Adenosine kinase inhibitors as a novel approach to anticonvulsant therapy. J Pharmacol Exp Ther. 1999 Jun;289(3):1669-77. PubMed PMID: 10336567.

Poon A, Sawynok J. Antinociception by adenosine analogs and an adenosine kinase inhibitor: dependence on formalin concentration. Eur J Pharmacol. 1995 Nov 14;286(2):177-84. PubMed PMID: 8605954.

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