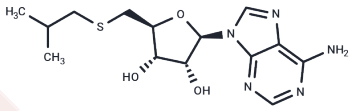
Data Sheet (Cat.No.T12908)

SIBA

Chemical Properties



CAS No. : 35899-54-8

Formula: C14H21N5O3S

Molecular Weight: 339.41

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	SIBA (5'-Deoxy-5'-isobutylthioadenosine) is a synthetic analogue of SAH, acts as an inhibitor of S-adenosylmethionine-mediated transmethylation. SIBA can interfere with a variety of enzymatic activities in vitro, such as SAH hydrolase, methylthioadenosine phosphorylase and cAMP phosphodiesterase. SIBA reversibly blocks the multiplication of herpes simplex type 1 virus (HSV)
Targets(IC50)	Nucleoside Antimetabolite/Analog,Parasite,HSV

Solubility Information

Solubility	DMSO: 90 mg/mL (265.17 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: 3.3 mg/mL (9.72 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	2.9463 mL	14.7314 mL	29.4629 mL
5 mM	0.5893 mL	2.9463 mL	5.8926 mL
10 mM	0.2946 mL	1.4731 mL	2.9463 mL
50 mM	0.0589 mL	0.2946 mL	0.5893 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

Carteni-Farina M, et al. Studies on the metabolism of 5'-isobutylthioadenosine (SIBA): phosphorolytic cleavage by methylthioadenosinephosphorylase. FEBS Lett. 1979 Aug 15;104(2):266-270.
Lawrence F, et al. Effect of 5'-deoxy-5'-isobutylthioadenosine on putrescine uptake and polyamine biosynthesis by chick embryofibroblasts. Biochem J. 1982 Jun 15;204(3):853-859.