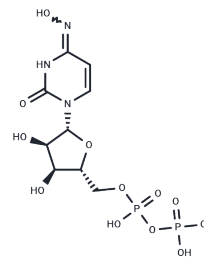


NHC-diphosphate

Chemical Properties

CAS No. :	39023-73-9
Formula:	C ₉ H ₁₅ N ₃ O ₁₂ P ₂
Molecular Weight:	419.18
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	NHC-diphosphate, a phosphorylated intracellular metabolite of β -d-N4-Hydroxycytidine (NHC) in its diphosphate form[1], serves as a potent antiviral agent. As a pyrimidine ribonucleoside, NHC effectively counters the replication of Venezuelan equine encephalitis virus (VEEV), Chikungunya virus (CHIKV), and hepatitis C virus (HCV)[1].
Targets(IC50)	Others,HCV Protease,Endogenous Metabolite,SARS-CoV,Topoisomerase,Virus Protease
In vitro	Huh-7 cells were exposed to (10-50 μ M; 4 h) either NHC or a McGuigan phosphoramidate prodrug of NHC. Subsequent analysis of intracellular levels of these compounds and their phosphorylated derivatives was performed using LC-MS/MS. The analysis revealed the presence of modest concentrations of NHC-monophosphate (MP) and NHC-diphosphate, with NHC-triphosphate being the predominant metabolite.[1].

Solubility Information

Solubility	H ₂ O: 160 mg/mL (381.7 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
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Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.3856 mL	11.9281 mL	23.8561 mL
5 mM	0.4771 mL	2.3856 mL	4.7712 mL
10 mM	0.2386 mL	1.1928 mL	2.3856 mL
50 mM	0.0477 mL	0.2386 mL	0.4771 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

Brenda I Hernandez-Santiago, et al. Metabolism of the anti-hepatitis C virus nucleoside beta-D-N4-hydroxycytidine in different liver cells. Antimicrob Agents Chemother. 2004 Dec;48(12):4636-42

Maryam Ehteshami, et al. Characterization of β -d- N4-Hydroxycytidine as a Novel Inhibitor of Chikungunya Virus.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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