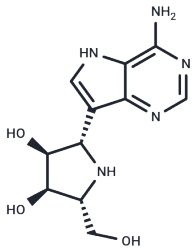
Data Sheet (Cat.No.T10491)

TargetMol

Galidesivir

Chemical Properties



CAS No. : 249503-25-1

Formula: C11H15N5O3

Molecular Weight: 265.27

Storage: Store at low temperature
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	Galidesivir (BCX4430) is a broad-spectrum antiviral compound, an adenosine analog that inhibits viral RNA-dependent RNA polymerase (RdRp) activity.Galidesivir inhibits a wide range of RNA viral pathogens in vitro, and reduces lung infections in infected animals.
Targets(IC50)	Antiviral,DNA/RNA Synthesis,SARS-CoV,Virus Protease
In vitro	Galidesivir (BCX4430) undergoes phosphorylation by cellular kinases to form a triphosphate that mimics ATP. The monophosphate nucleotide of the drug is then incorporated by viral RNA polymerases into the growing RNA chain, leading to premature chain termination[1].In inhibiting the infection of Vero cells with Yellow Fever Virus (YFV), Galidesivir demonstrates effectiveness. The EC50, as determined by the neutral red uptake assay, is 8.3 μg/ml (24.5 μM)[4].
In vivo	Galidesivir (BCX4430) exhibits activity following intramuscular, intraperitoneal, and oral administration in various experimental infections. In nonclinical studies involving lethal infections with Ebola virus, Marburg virus, Rift Valley fever virus, and Yellow Fever virus, Galidesivir has demonstrated pronounced efficacy[1].In a hamster model of Yellow Fever (YF), Galidesivir administered at 4 mg/kg via intraperitoneal injection twice daily for 7 days proves to be effective[3].

Solubility Information

Solubility	H2O: 50 mg/mL (188.49 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	3.7697 mL	18.8487 mL	37.6974 mL
5 mM	0.7539 mL	3.7697 mL	7.5395 mL
10 mM	0.377 mL	1.8849 mL	3.7697 mL
50 mM	0.0754 mL	0.377 mL	0.7539 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

Taylor R, et al. BCX4430 - A broad-spectrum antiviral adenosine nucleoside analog under development for the treatment of Ebola virus disease. J Infect Public Health. 2016;9(3):220-226.
Elfiky AA, et al. ICN-1229, Remdesivir, PSI-7977, Galidesivir, and GS 1278 against SARS-CoV-2 RNA dependent RNA polymerase (RdRp): A molecular docking study. Life Sci. 2020 Mar 25:117592.
Julander JG, et al. BCX4430, a novel nucleoside analog, effectively treats yellow fever in a Hamster model. Antimicrob Agents Chemother. 2014;58(11):6607-6614.
Warren TK, et al. Protection against filovirus diseases by a novel broad-spectrum nucleoside analogue BCX4430. Nature. 2014;508(7496):402-405.