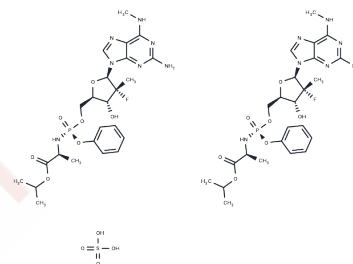


Bemnifosbuvir hemisulfate

Chemical Properties

CAS No. :	2241337-84-6
Formula:	C48H68F2N14O18P2S
Molecular Weight:	1261.15
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	Bemnifosbuvir hemisulfate (AT-527) is a potent inhibitor of HCV virus replication.
Targets(IC50)	HCV Protease,SARS-CoV
In vitro	The potent in vitro activity of AT-511, the free base of bemnifosbuvir hemisulfate, against several coronaviruses, including SARS-CoV-2. In normal human airway epithelial cells, the concentration of AT-511 required to inhibit replication of SARS-CoV-2 by 90% (EC90) was 0.477µM, very similar to its EC90 against human coronavirus (HCoV) -229E, HCoV-OC43, and SARS-CoV in Huh-7 cells[1].
In vivo	When given orally to rats and monkeys, bemnifosbuvir hemisulfate preferentially delivered high levels of AT-9010 in the liver in vivo. These favorable preclinical attributes support bemnifosbuvir hemisulfate may increase SVR rates[2].

Solubility Information

Solubility	DMSO: 170 mg/mL (134.8 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: 5 mg/mL (3.96 mM),Sonication is recommended. <i>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.</i>

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	0.7929 mL	3.9646 mL	7.9293 mL
5 mM	0.1586 mL	0.7929 mL	1.5859 mL
10 mM	0.0793 mL	0.3965 mL	0.7929 mL
50 mM	0.0159 mL	0.0793 mL	0.1586 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

Good S S , Westover J , Jung K H , et al. AT-527, a Double Prodrug of a Guanosine Nucleotide Analog, Is a Potent Inhibitor of SARS-CoV-2 In Vitro and a Promising Oral Antiviral for Treatment of COVID-19[J]. *Antimicrobial agents and chemotherapy*, 65(4):e02479-20.

Good S S , Moussa A , Zhou X J , et al. Preclinical evaluation of AT-527, a novel guanosine nucleotide prodrug with potent, pan-genotypic activity against hepatitis C virus[J]. *PLoS ONE*, 2020, 15(1):e0227104-.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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