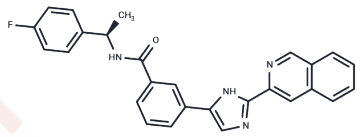
Data Sheet (Cat.No.T13221)

TargetMol

TTP-8307

Chemical Properties



CAS No. : 950225-08-8

Formula: C27H21FN4O

Molecular Weight: 436.48

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	TTP-8307 is an antiviral compound that inhibits the replication of rhinoviruses and enteroviruses, and inhibits coxsackievirus B3 and poliovirus by interfering with viral RNA synthesis.TTP-8307 can be used in the study of viral infections.
Targets(IC50)	HCV Protease,DNA/RNA Synthesis,Virus Protease
In vitro	TTP-8307 targeted non-structural protein 3A and inhibited the replication of enterovirus B3 (CVB3 Nancy) with an EC50 of 1.2 μM. In addition, TTP-8307 inhibited the replication of three Sabin poliovirus strains, as well as enteroviruses A16 and A21, with EC50s of 0.85 and 5.34 μM, respectively.Meanwhile, TTP-8307 inhibited the replication of human rhinoviruses (HRVs) 2, 29, 39, 45, 63 and 85 was also inhibitory. Mutations in non-structural protein 3A caused resistance to TTP-8307, a novel enterovirus replication inhibitor. In addition, TTP-8307 inhibits OSBP-dependent viruses, including encephalomyelitis virus (EMCV) and hepatitis C virus (HCV). [1][2]

Solubility Information

Solubility	DMSO: 80 mg/mL (183.28 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+90% Corn Oil: 3.3 mg/mL (7.56 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	2.2911 mL	11.4553 mL	22.9106 mL
5 mM	0.4582 mL	2.2911 mL	4.5821 mL
10 mM	0.2291 mL	1.1455 mL	2.2911 mL
50 mM	0.0458 mL	0.2291 mL	0.4582 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

De Palma AM, et al. Mutations in the nonstructural protein 3A confer resistance to the novel enterovirus replication inhibitor TTP-8307. Antimicrob Agents Chemother. 2009 May;53(5):1850-7.
Albulescu L, et al. Uncovering oxysterol-binding protein (OSBP) as a target of the anti-enteroviral compound TTP-8307. Antiviral Res. 2017 Apr;140:37-44.