

GS-9256

Chemical Properties

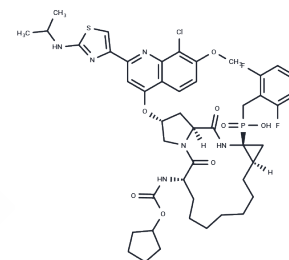
CAS No. : 1001094-46-7

Formula: C₄₆H₅₆ClF₂N₆O₈PS

Molecular Weight: 957.46

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	GS-9256 is a selective inhibitor of the HCV NS3 protease, exhibiting favorable pharmacokinetic properties and antiviral activity [1].
Targets(IC50)	HCV Protease
In vitro	GS-9256 demonstrates potent antiviral activity with a mean EC ₅₀ of 20 nM across a concentration range of 0.002-0.183 μM in GT1b huh-luc cells harboring a luciferase-encoding replicon [1]. Furthermore, at 3 μM, GS-9256 maintains efficacy against all tested resistant mutations in NS5B and NS5A inhibitors, showcasing its metabolic stability in microsomes and hepatocytes from rodents, dogs, and humans [1].
In vivo	GS-9256 exhibits high bioavailability in mice (approximately 100%) when administered intravenously at 1 mg/kg with a 30-minute exposure, while showing moderate bioavailability in rats (14%), dogs (21%), and monkeys (14%). The compound's elimination half-life spans approximately 2 hours in mice, 0.6 hours in rats, 5 hours in dogs, and 4 hours in monkeys. Regarding the pharmacokinetic parameters at indicated doses for each species (IV: 2 mg/kg in mice, 1 mg/kg in rats, dogs, and monkeys; Oral: 50 mg/kg in mice, 5 mg/kg in rats and monkeys, and 4 mg/kg in dogs), they are as follows: for the CD-1 mouse, Sprague-Dawley rat, Beagle dog, and Cynomolgus monkey, the clearance (CL) is 2.0, 1.26, 0.04, and 0.33 L/h/kg respectively, while the volume of distribution at steady state (V _{ss}) is 2.3, 0.16, 0.09, and 0.27 L/kg respectively [1].

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.0444 mL	5.2222 mL	10.4443 mL
5 mM	0.2089 mL	1.0444 mL	2.0889 mL
10 mM	0.1044 mL	0.5222 mL	1.0444 mL
50 mM	0.0209 mL	0.1044 mL	0.2089 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.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

This product is for Research Use Only · Not for Human or Veterinary or Therapeutic Use

Tel:781-999-4286 E_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481