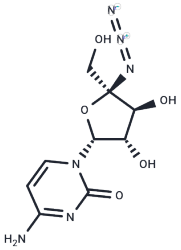
Data Sheet (Cat.No.T16774)

RO-9187

Chemical Properties



CAS No. : 876708-03-1

Formula: C9H12N6O5

Molecular Weight: 284.23

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	RO-9187 is an effective HCV virus replication inhibitor(IC50: 171 nM).
Targets(IC50)	HCV Protease
In vitro	RO-9187 suppresses RNA synthesis by HCV polymerases from either HCV genotypes 1a and 1b or containing S96T or S282T point mutations with similar potencies, suggesting no cross-resistance with either R1479 or 2′-C-methyl nucleosides. RO-9187 is excellent substrates for deoxycytidine kinase and is phosphorylated with efficiencies up to 3-fold higher than deoxycytidine. The formation of RO-9187-TP increased in a time- and dose-dependent manner [1].
In vivo	Plasma exposures of RO-9187 in rats increase dose-dependently from 10 to 2000 mg/kg after oral administration. Plasma concentrations of RO-9187 (1.4 and 26 μM) are achieved in rats and dogs at the 10 mg/kg dose, respectively, with concentrations reaching up to 57 μM in rats at 2000 mg/kg/day[1].

Solubility Information

Solubility	H2O: 7.14 mg/mL (25.12 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	3.5183 mL	17.5914 mL	35.1828 mL
5 mM	0.7037 mL	3.5183 mL	7.0366 mL
10 mM	0.3518 mL	1.7591 mL	3.5183 mL
50 mM	0.0704 mL	0.3518 mL	0.7037 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

Klumpp K, et al. 2'-deoxy-4'-azido nucleoside analogs are highly potent inhibitors of hepatitis C virus replication despite the lack of 2'-alpha-hydroxyl groups. J Biol Chem. 2008 Jan 25;283(4):2167-75.