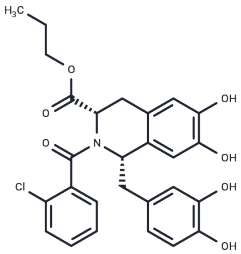
Data Sheet (Cat.No.T72450)

TargetMol

Influenza virus-IN-6

Chemical Properties



CAS No. : 2919303-26-5

Formula: C27H26ClNO7

Molecular Weight: 511.95

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	Influenza virus-IN-6 (Compound 35) is a potent inhibitor of the N-terminal domain of the polymerase acidic protein (PA N) endonuclease subunit of the influenza virus, with an inhibitory concentration 50 (IC 50) value of 0.20 μM [1].
Targets(IC50)	Influenza Virus
In vitro	Influenza virus-IN-6 (Compound 35) exhibits anti-influenza virus activity with EC50 values of 1.28 ± 0.35, 1.12 ± 0.65, 0.76 ± 0.11, and 0.43 ± 0.06 μM against H1N1, H5N1, H3N2, and Flu B, respectively, in MDCK cells after 48 hours [1]. At 5-20 μM for 24 hours, it affects viral replication without impacting viral particles, cellular adsorption, or release [1]. Additionally, at 2.5-10 μM for 24 hours, Influenza virus-IN-6 inhibits influenza virus polymerase activity [1]. The compound also demonstrates good stability in mouse plasma, liver microsomes, and intestinal S9-UDPGA [1].
In vivo	Influenza virus-IN-6 (Compound 35) administered intraperitoneally at 7.5-30 mg/kg/d twice daily for seven days significantly protected mice against influenza virus infection [1]. In rats (n = 5), the pharmacokinetic profile of Influenza virus-IN-6 (Compound 35) after a single dose revealed the following parameters: for intravenous (IV) administration (2 mg/kg), half-life (T 1/2) was 0.33 ± 0.07 hours, peak plasma concentration (C max) was 1586.55 ± 366.48 ng/mL, area under the curve (AUC 0-t) was 536.45 ± 58.72 h·ng/mL, and clearance (CL) was 53.76 ± 13.18 mL/min/kg; for oral (PO) administration (10 mg/kg), T 1/2 was 0.82 ± 0.16 hours, time to maximum concentration (T max) was 0.52 hours, C max was 92.20 ± 36.25 ng/mL, AUC 0-t was 164.30 ± 26.37 h·ng/mL, and bioavailability (F %) was 6.13%; for intraperitoneal (IP) injection (15 mg/kg), T 1/2 was 1.07 ± 0.25 hours, T max was 0.45 hours, C max was 889.52 ± 233.17 ng/mL, AUC 0-t was 790.62 ± 188.31 h·ng/mL, and F % was 29.50% [1]. IV represents intravenous injection, IP represents intraperitoneal injection, and PO represents the gastrointestinal route.

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.9533 mL	9.7666 mL	19.5332 mL
5 mM	0.3907 mL	1.9533 mL	3.9066 mL
10 mM	0.1953 mL	0.9767 mL	1.9533 mL
50 mM	0.0391 mL	0.1953 mL	0.3907 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.