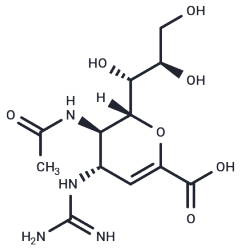
Data Sheet (Cat.No.T2529)

TargetMol

Zanamivir

Chemical Properties



CAS No. : 139110-80-8

Formula: C12H20N4O7

Molecular Weight: 332.31

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	Zanamivir (GG167) is a guanido-neuraminic acid that is used to inhibit NEURAMINIDASE.
Targets(IC50)	Antibiotic,Influenza Virus
In vitro	Zanamivir reduces pulmonary viral titers and decreases morbidity and mortality rates in a lethal murine model infected with the virus.
In vivo	Zanamivir effectively reduces viral replication in vitro by inhibiting the influenza neuraminidase and preventing the cleavage of sialic acid residues. This interference blocks the spread of progeny viruses in mucosal secretions and lowers viral infectivity. Furthermore, Zanamivir diminishes the area of plaques formed by neuraminidase-deficient mutants, indicating that its action in disrupting cell-cell fusion is independent of its neuraminidase inhibition activity. The compound also prevents the adhesion and fusion of persistently infected cells with uninfected erythrocytes. Assessment through lipid mixing and content mixing reveals that Zanamivir does not affect erythrocyte adhesion but does inhibit HA2b-red blood cell fusion. Additionally, Zanamivir leads to decreased sensitivity in influenza A/H1N1 variants His274Asn, His274 gly, His274Ser, and His274 gln.

Solubility Information

Solubility	H2O: 10 mg/mL (30.09 mM),Sonication and heating are recommended. DMSO: < 1 mg/mL (insoluble) (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	3.0092 mL	15.0462 mL	30.0924 mL
5 mM	0.6018 mL	3.0092 mL	6.0185 mL
10 mM	0.3009 mL	1.5046 mL	3.0092 mL
50 mM	0.0602 mL	0.3009 mL	0.6018 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

Gubareva LV, et al. J Infect Dis, 1998, 178(6), 1592-1596.
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Greengard O, et al. J Virol, 2000, 74(23), 11108-11114.