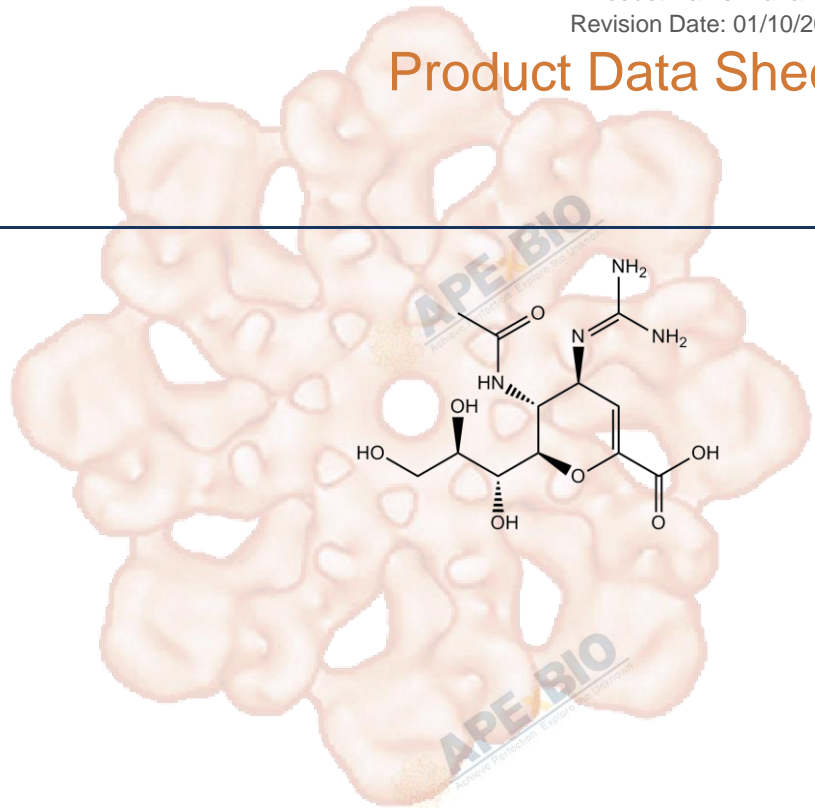


Product Data Sheet

Zanamivir

Cat. No.:	B2136
CAS No.:	139110-80-8
Formula:	C ₁₂ H ₂₀ N ₄ O ₇
M.Wt:	332.31
Synonyms:	
Target:	Microbiology & Virology
Pathway:	NA
Storage:	Store at -20°C



Solvent & Solubility

insoluble in DMSO; insoluble in EtOH; ≥ 8.99 mg/mL in H₂O

In Vitro

Preparing Stock Solutions	Solvent	Mass		
		1mg	5mg	10mg
	Concentration			
	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

Please refer to the solubility information to select the appropriate solvent.

Biological Activity

Shortsummary

Influenza A/B virus neuraminidases inhibitor

IC₅₀ & Target

In Vitro

Cell Viability Assay

Cell Line:	HeLa-CD4-LTR-βgal cells and HeLa-tat cell, CV-1 cell
Preparation method:	The solubility of this compound in DMSO is >16.6mg/mL. General tips for obtaining a higher concentration: Please warm the tube at 37 °C for 10 minutes and/or shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.
Reacting conditions:	5 nM-10 mM

	Applications:	In HeLa-CD4-LTR-βgal cells, zanamivir interfered with cell-cell fusion with the IC50 of 0.19 mM. In CV-1 cell monolayers, zanamivir (0.5 mM) reduced plaque area by 97%. Zanamivir caused a concentration-dependent inhibition of hemadsorption. Zanamivir (5 mM) strikingly reduced lipid mixing. zanamivir suppressed the growth of influenza A and B viruses with IC50 values of 5 nM-14 nM for laboratory-passaged strains and from 20 nM-16 μM for clinical isolates.
In Vivo	Animal experiment	
	Animal models:	Mice infected with influenza A
	Dosage form:	Intranasal, 0.01-4 mg/kg
	Applications:	Intranasal zanamivir treatment given prophylactically plus twice daily over days 0 to 3 in mice infected with influenza A reduced mortality and viral titres in lung homogenated and improved lung consolidation scores over 10 days.
	Other notes:	Please test the solubility of all compounds indoor, and the actual solubility may slightly differ with the theoretical value. This is caused by an experimental system error and it is normal.

Product Citations

See more customer validations on www.apexbt.com.

References

- [1]. Greengard O, Poltoratskaia N, Leikina E, et al. The anti-influenza virus agent 4-GU-DANA (zanamivir) inhibits cell fusion mediated by human parainfluenza virus and influenza virus HA[J]. Journal of virology, 2000, 74(23): 11108-11114.
- [2]. Elliott M. Zanamivir: from drug design to the clinic[J]. Philosophical Transactions of the Royal Society of London. Series B, 2001, 356(1416): 1885.

Caution

FOR RESEARCH PURPOSES ONLY.

NOT FOR HUMAN, VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

Specific storage and handling information for each product is indicated on the product datasheet. Most APEX BIO products are stable under the recommended conditions. Products are sometimes shipped at a temperature that differs from the recommended storage temperature. Shortterm storage of many products are stable in the short-term at temperatures that differ from that required for long-term storage. We ensure that the product is shipped under conditions that will maintain the quality of the reagents. Upon receipt of the product, follow the storage recommendations on the product data sheet.



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