Product Datasheet

Technical Data

Formula	$C_{12}H_{20}N_4O_7$					
Molecular Weight	332.31	**CAS No.**	139110-80-8			
Solubility (25°C)*	In vitro	Water (warmed with 50°C water bath)	16.5 mg/mL (49.65 mM)			
		DMSO	Insoluble			
		Ethanol	Insoluble			
	In vivo (Add solvents to the product individually and in order)	Oral Administration	Homogeneous suspension	CMC-NA	≥5mg/ml	Taking the 1 mL working solution as an example, add 5 mg of this product to 1 ml of CMC-Na solution, mix evenly to obtain a homogeneous suspension with a final concentration of 5 mg/ml.

* <1 mg/ml means slightly soluble or insoluble.
* Please note that Capsid Bio tests the solubility of all compounds in-house, and the actual solubility may differ slightly from published values. This is normal and is due to slight batch-to-batch variations.
* Room temperature shipping (Stability testing shows this product can be shipped at 2-8°C for storage purposes.)

Preparing Stock Solutions

Volume / Mass / Concentration	1 mg	5 mg	10 mg
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	-	-	-

Biological Activity

Description	Zanamivir (GG167,GR 121167X) is a neuraminidase inhibitor used in the treatment and prophylaxis of influenza caused by influenza A virus and influenza B virus.
Targets	neuraminidase [1]
In vitro	Zanamivir, a novel neuraminidase inhibitor, is effective at decreasing replication of the virus in vitro. [1] This compound results in reduced sensitivity in influenza A/H1N1 variant His274Asn, as well as His274Gly, His274Ser, and His274Gln. [2] It blocks influenza neuraminidase and prevents the cleavage of sialic acid residues, thus interfering with progeny virus dispersement within the mucosal secretions and reducing viral infectivity. [3] This agent prevents hemadsorption and fusion of persistently infected cells with uninfected cells. It reduces the number (but not the area) of plaques if present only during the adsorption period and reduces plaque area (but not number) if added only after the 90-min adsorption period in plaque assays. The compound also reduces the area of plaques formed by a neuraminidase-deficient variant, confirming that its interference with cell-cell fusion is unrelated to inhibition of neuraminidase activity. It has no effect on hemadsorption but does inhibit HA2b-red blood cell fusion, as judged by both lipid mixing and content mixing. [4]
In vivo	Zanamivir reduces lung titers of the virus and decreases morbidity and mortality in a model of lethal challenge in mice. [1]

References

https://pubmed.ncbi.nlm.nih.gov/9815209/ https://pubmed.ncbi.nlm.nih.gov/12435681/ https://pubmed.ncbi.nlm.nih.gov/11197587/

+ Expand

RETURN POLICY

Capsid Bio's Unconditional Return Policy ensures a smooth online shopping experience for our customers. If you are in any way unsatisfied with your purchase, you may return any item(s) within 7 days of receiving it. In the event of product quality issues, either protocol related or product related problems, you may return any item(s) within 365 days from the original purchase date. Please follow the instructions below when returning products.

SHIPPING & STORAGE

Capsid Bio products are transported at room temperature. If you receive the product at room temperature, please rest assured, the Capsid Bio Quality Inspection Department has conducted experiments to verify that the normal temperature placement of one month will not affect the biological activity of powder products. After collecting, please store the product according to the requirements described in the datasheet. Most Capsid Bio products are stable under the recommended conditions.

NOT FOR HUMAN, VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

EU Headquarters
Gajeva ulica 28, HR-10000 Zagreb, Croatia

US Headquarters
12222 Merit Dr STE 130 Dallas, Texas, 75251

UK Headquarters
121 ABILITY HOUSE, BROOKER ROAD, EN9 1JH, ESSEX

Orders: Sales@capsidbio.com
Enquiries: info@capsidbio.com
www.capsidbio.com