



# **Certificate of Analysis**

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Product Name: Zanamivir Catalog No.: 7187 Batch No.: 1

CAS Number: 139110-80-8

IUPAC Name: 5-(Acetylamino)-4-[(aminoiminomethyl)amino]-2,6-anhydro-3,4,5-trideoxy-5-(Acetylamino)-4-[(aminoiminomethyl)

amino]-2,6-anhydro-3,4,5-trideoxy-D-glycero-D-galactonon-2-enonic acid-glycero-D-galactonon-2-enonic acid

#### 1. PHYSICAL AND CHEMICAL PROPERTIES

**Batch Molecular Formula:**  $C_{12}H_{20}N_4O_7.1\frac{1}{2}H_2O$ 

Batch Molecular Weight:359.33Physical Appearance:White solidSolubility:water to 5 mMStorage:Store at -20°C

**Batch Molecular Structure:** 

# 2. ANALYTICAL DATA

**HPLC:** Shows 99.1% purity

<sup>1</sup>H NMR: Consistent with structure

Mass Spectrum: Consistent with structure

**Optical Rotation:**  $[\alpha]_D = +34.6$  (Concentration = 1, Solvent = Water)

Microanalysis: Carbon Hydrogen Nitrogen

Theoretical 40.11 6.45 15.59 Found 39.7 6.52 15.54

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use



# **Product Information**

Print Date: Aug 17th 2020

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amino]-2,6-anhydro-3,4,5-trideoxy-D-qlycero-D-galactonon-2-enonic acid-glycero-D-galactonon-2-enonic acid

#### **Description:**

Influenza viral neuraminidase inhibitor (IC $_{50}$  values are 0.95 nM and 2.7 nM for influenza A and B, respectively). Inhibits neuraminidase, preventing the cleavage of sialic acid on the cell receptors, and release of the newly formed virions.

# **Physical and Chemical Properties:**

Batch Molecular Formula: C<sub>12</sub>H<sub>20</sub>N<sub>4</sub>O<sub>7</sub>.1½H<sub>2</sub>O

Batch Molecular Weight: 359.33 Physical Appearance: White solid

**Minimum Purity:** ≥98%

### **Batch Molecular Structure:**

Storage: Store at -20°C

# Solubility & Usage Info:

water to 5 mM

#### Stability and Solubility Advice:

Some solutions can be difficult to obtain and can be encouraged by rapid stirring, sonication or gentle warming (in a 45-60°C water bath).

Information concerning product stability, particularly in solution, has rarely been reported and in most cases we can only offer a general guide. Our standard recommendations are:

SOLIDS: Provided storage is as stated on the product label and the vial is kept tightly sealed, the product can be stored for up to 6 months from date of receipt.

SOLUTIONS: We recommend that stock solutions, once prepared, are stored aliquoted in tightly sealed vials at -20°C or below and used within 1 month. Wherever possible solutions should be made up and used on the same day.

#### References:

**Hall** et al (2020) A search for medications to treat COVID-19 via in silico molecular docking models of the SARS-CoV-2 spike glycoprotein and 3CL protease Travel Med.Infect.Dis. **35** 101646.. PMID: 32294562.

**McKimm-Breschkin** *et al* (2005) Management of influenza virus infections with neuraminidase inhibitors: detection, incidence, and implications of drug resistance. Treat Respir.Med. *4* 107. PMID: 15813662.

Elliott et al (2001) Zanamivir: from drug design to the clinic. Philos.Trans.R.Soc.Lond.B.Biol.Sci. 356 1885. PMID: 11779388.

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