



Certificate of Analysis

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Product Name: Oseltamivir phosphate Catalog No.: 7224 Batch No.: 1

CAS Number: 204255-11-8

IUPAC Name: Ethyl (3R,4R,5s)-4-Acetamido-5-amino-3-(pentan-3-yloxy)cyclohex-1-ene-1-carboxylate phosphate

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: $C_{16}H_{28}N_2O_4.H_3PO_4$

Batch Molecular Weight: 410.4

Physical Appearance: Off-white solid
Solubility: DMSO to 100 mM

water to 100 mM

Storage: Store at -20°C

Batch Molecular Structure:

2. ANALYTICAL DATA

HPLC: Shows 98.5% purity

¹H NMR: Consistent with structure

Mass Spectrum: Consistent with structure

Optical Rotation: $[\alpha]_D = -32.5$ (Concentration = 0.7, Solvent = Water)

Microanalysis: Carbon Hydrogen Nitrogen

Theoretical 46.83 7.61 6.83 Found 46.51 7.63 6.76



Product Information

Print Date: Jul 6th 2020

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IUPAC Name: Ethyl (3R,4R,5s)-4-Acetamido-5-amino-3-(pentan-3-yloxy)cyclohex-1-ene-1-carboxylate phosphate

Description:

Viral neuraminidase inhibitor prodrug; metabolized to GS 4071. Metabolite exhibits potent inhibition of neuraminidase from multiple influenza strains (IC $_{50}$ values range from 0.3 to 2 nM). Inhibits cellular effects of influenza infection in vitro (IC $_{50}$ values range from 0.6 to 150 nM). Displays highest potency against H1N1 and H3N2 influenza A strains. Inhibits H1N1 influenza infection in mice.

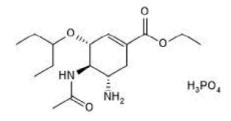
Physical and Chemical Properties:

Batch Molecular Formula: C₁₆H₂₈N₂O₄.H₃PO₄

Batch Molecular Weight: 410.4 Physical Appearance: Off-white solid

Minimum Purity: ≥98%

Batch Molecular Structure:



Storage: Store at -20°C

Solubility & Usage Info:

DMSO to 100 mM water to 100 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).

Catalog No.: 7224

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:

Mendel *et al* (1998) Oral administration of a prodrug of the influenza virus neuraminidase inhibitor GS 4071 protects mice and ferrets against influenza infection. Antimicrob. Agents Chemother. *42* 640. PMID: 9517945.

Kim et al (1997) Influenza neuraminidase inhibitors possessing a novel hydrophobic interaction in the enzyme active site: design, synthesis, and structural analysis of carbocyclic sialic acid analogues with potent anti-influenza activity. J.Am.Chem.Soc. 119 681. PMID: 16526129.

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