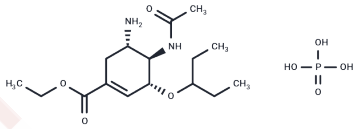
Data Sheet (Cat.No.T1486)

TargetMol

Oseltamivir phosphate

Chemical Properties



CAS No. : 204255-11-8

Formula: C16H28N2O4·H3PO4

Molecular Weight: 410.4

Storage: Store at low temperature
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	Oseltamivir phosphate (GS 4104) is a neuraminidase (NA) inhibitor with oral activity. Oseltamivir phosphate has antiviral activity and is effective against a wide range of influenza viruses, inhibiting mature influenza viruses from breaking away from host cells.
Targets(IC50)	Influenza Virus
In vitro	**METHODS**: Preparation of D-Luciferin potassium for in vitro bioluminescence analysis: 1. Prepare 200× D-Luciferin reserve solution (30 mg/mL) with sterile water and mix gently until all dissolved. It can be used immediately after preparation or stored at -20°C. 2. Prepare 1× D-Luciferin (150 μg/mL) working solution in preheated tissue culture medium. 3. Aspirate the medium from the cultured cells. 4. Add 1× D-Luciferin solution to the cells before imaging. Incubate the cells at 37°C for a short period of time before imaging to increase signal.
In vivo	For in vivo experiments at higher doses, D-Luciferin potassium (T4139) or D-Luciferin Sodium (T19743) are recommended.
Cell Research	Cells are incubated in 96-well plates (5,000 cells/well) and allowed to adhere for 24 hours in 1× DMEM media containing 10% FCS. The media are replaced with fresh DMEM media containing 5% FCS with or without various concentrations of tamoxifen or OP for indicated time periods. Cell viability is tested using WST-1 cell proliferation assay.(Only for Reference)

Solubility Information

Solubility	DMSO: 242.5 mg/mL (590.89 mM),Sonication is recommended. H2O: 80 mg/mL (194.93 mM),Sonification is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+40% PEG300+5% Tween 80+45% Saline: 5 mg/mL (12.18 mM),Sonication is recommended. *Please add the solvents sequentially, clarifying the solution as much as possible before adding the next one. Dissolve by heating and/or sonication if necessary. Working solution is recommended to be prepared and*

In vivo Formulation	*used immediately. The formulation provided above is for reference purposes only. In vivo formulations may vary and should be modified based on specific experimental conditions.*

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.4366 mL	12.1832 mL	24.3665 mL
5 mM	0.4873 mL	2.4366 mL	4.8733 mL
10 mM	0.2437 mL	1.2183 mL	2.4366 mL
50 mM	0.0487 mL	0.2437 mL	0.4873 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

Song EJ, et al. Inhibitory effects of aprotinin on influenza A and B viruses in vitro and in vivo. Sci Rep. 2021 May 3; 11(1):9427.
WEI X U, Shuai X, Jing P, et al. The antihistamine drugs carbinoxamine maleate and chlorpheniramine maleate exhibit potent antiviral activity against a broad spectrum of influenza viruses. Frontiers in Microbiology. 2018 Nov 6;9:2643
de Oliveira JT, et al. Anti-influenza neuraminidase inhibitor oseltamivir phosphate induces canine mammary cancer cell aggressiveness. PLoS One. 2015 Apr 7;10(4):e0121590.
Cao L, She Z, Zhao Y, et al.Inhibition of RAN Attenuates Influenza A Virus Replication and Nucleoprotein Nuclear Export.Emerging Microbes & Infections.2024 (just-accepted): 2387910.
Broecker-Preuss M, et al. The BH3 mimetic drug ABT-737 induces apoptosis and acts synergistically with chemotherapeutic drugs in thyroid carcinoma cells. Cancer Cell Int. 2016 Apr 2;16:27.
Wang X, Kong H, Chu B, et al.Identification of a broad-inhibition influenza neuraminidase antibody from pre-existing memory B cells.Cell Host & Microbe.2024
Davies BE, et al. J Antimicrob Chemother. 2010, 65 Suppl 2:ii5-ii10.
Huang H, et al. Transplacental transfer of Oseltamivir phosphate and its metabolite Oseltamivir carboxylate using the ex vivo human placenta perfusion model in Chinese Hans population. J Matern Fetal Neonatal Med. 2016 Aug 8:1-5.
Li P, et al. A Simple and Robust Approach for Evaluation of Antivirals Using a Recombinant Influenza Virus Expressing Gaussia Luciferase. Viruses. 2018 Jun 13;10(6). pii: E325.
WEI X U, Shuai X, Jing P, et al. The antihistamine drugs carbinoxamine maleate and chlorpheniramine maleate exhibit potent antiviral activity against a broad spectrum of influenza viruses[J]. Frontiers in Microbiology. 2018 Nov 6;9:2643.