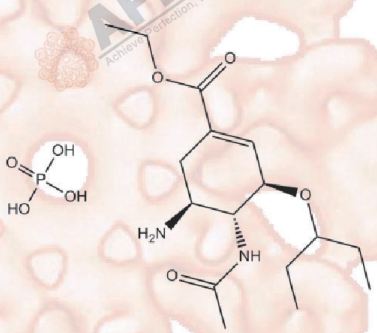
Product Data Sheet

Oseltamivir phosphate



Cat. No.: B1803
CAS No.: 204255-11-8
Formula: C16H31N2O8P
M.Wt: 410.4
Synonyms:
Target: Microbiology & Virology
Pathway: NA
Storage: Store at -20°C

Solvent & Solubility

In Vitro

⩾20.3 mg/mL in DMSO with gentle warming; ⩾110 mg/mL in H2O; ⩾2.79 mg/mL in EtOH with gentle warming and ultrasonic

Preparing Stock Solutions

Concentration \ Mass (Solvent)	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

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

Biological Activity

Shortsummary	Potent and selective inhibitor of the neuraminidase
IC_{50} & Target	

In Vitro

Cell Viability Assay

Cell Line:	MDCK cells
Preparation method:	The solubility of this compound in DMSO is limited. 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:	0 ~ 12 μM
	Applications:	Oseltamivir Phosphate exhibited inhibitory effects against both H5N1 and H9N2 viruses. In MDCK cells, the active metabolite of Oseltamivir Phosphate reduced viral replication with the EC50 values ranging from 7.5 to 12 μM, and reduced neuraminidase activity with the IC50 values ranging from 7.0 to 15 nM.
In Vivo	**Animal experiment**	
	Animal models:	Mice infected with A/HK/156/97 (H5N1) or A/Qa/HK/G1/97 (P3)
	Dosage form:	0.1, 1, 10 and 100 mg/kg/d; p.o.
	Applications:	In mice infected with H5N1, Oseltamivir Phosphate significantly decreased the titer of virus in the lungs. However, the reduction in virus titer was almost the same as between the 1 and 10 mg/kg/d dose groups and the 100 mg/kg/d dose group. In mice infected with P3, Oseltamivir Phosphate at the doses of 1 and 10 mg/kg/d also significantly reduced the virus titer in lungs, and a dose of 100 mg/kg/d Oseltamivir Phosphate completely inhibited virus replication.
	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

1. Huang MF, Lin YR, et al. "Reductive amination assistance for quantification of oseltamivir phosphate and oseltamivir carboxylate byHPLC-MS/MS." J Chromatogr B Analyt Technol Biomed Life Sci. 2018 Jun 15;1087-1088:23-28.PMID:29702353

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References

[1]. Leneva IA, Roberts N, Govorkova EA, Goloubeva OG, Webster RG. The neuraminidase inhibitor GS4104 (oseltamivir phosphate) is efficacious against A/Hong Kong/156/97 (H5N1) and A/Hong Kong/1074/99 (H9N2) influenza viruses. Antiviral Res. 2000 Nov;48(2):101-15.

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 APExBIO 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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