Oseltamivir Phosphate

Catalog No.C08705 Batch:C0870503

Product Datasheet

Technical Data

Formula	$C_{16}H_{28}N_2O_4 \cdot H_3PO_4$					
Molecular Weight	410.4	**CAS No.**	204255-11-8			
Solubility (25°C)*	In vitro	DMSO	82 mg/mL (199.8 mM)			
		Water	82 mg/mL (199.8 mM)			
		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

Concentration \ Volume \ Mass	1 mg	5 mg	10 mg
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

Biological Activity

Description	Oseltamivir Phosphate(Tamiflu) is a potent and selective inhibitor of the neuraminidase that is essential for replication of influenza A and B viruses, used to prevent influenza.
Targets	Neuraminidase [1]
In vitro	Oseltamivir Phosphate, anti-Neu1 antibodies, and matrix metalloproteinase-9-specific inhibitor blocks Neu1 activity associated with EGF-stimulated TNBC MDA-MB-231 cells[2]. Oseltamivir slows the spread of influenza (flu) virus between cells in the body by stopping the virus from chemically cutting ties with its host cell.
In vivo	Oseltamivir Phosphate monotherapy may be the effective treatment therapy for TNBC(Triple-negative breast cancers)[2]. It is efficacious in treating infections caused by H5N1 and H9N2 influenza viruses in mice[3]. After dosing, the prodrug (Oseltamivir phosphate) is readily absorbed from the gastrointestinal tract and rapidly converted into the active metabolite, OC. In all patient groups, OC has high bioavailability and is systemically distributed to infection sites at concentrations sufficient to inhibit a range of influenza virus neuraminidases[4].

Protocol (from reference)

Cell Assay:[2]

- **Cell lines**
  MDA-MB-231 cells/MCF-7 cells
- **Concentrations**
  500, 600, 700, 800 μg/mL
- **Incubation Time**
  24, 48, and 72 h
- **Method**
  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.

Animal Study:[2]

- **Animal Models**
  RAGxCγ double mutant mouse
- **Dosages**
  30 or 50 mg/kg
- **Administration**
  i.p.

References

https://pubmed.ncbi.nlm.nih.gov/9517946/ https://pubmed.ncbi.nlm.nih.gov/25525387/ https://pubmed.ncbi.nlm.nih.gov/11114412/

+ 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