

PRODUCT INFORMATION



Oseltamivir (phosphate)

Item No. 16070

CAS Registry No.: 204255-11-8
Formal Name: 4R-(acetylamino)-5S-amino-3R-(1-ethylpropoxy)-1-cyclohexene-1-carboxylic acid, ethyl ester, monophosphate

Synonyms: GS-4104, Ro 64-0796/002

MF: C₁₆H₂₈N₂O₄ • H₃PO₄

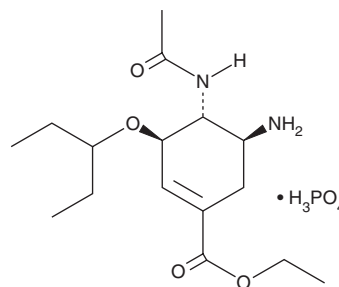
FW: 410.4

Purity: ≥98%

Supplied as: A crystalline solid

Storage: -20°C

Stability: ≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

Oseltamivir (phosphate) is supplied as a crystalline solid. A stock solution may be made by dissolving the oseltamivir (phosphate) in the solvent of choice, which should be purged with an inert gas. Oseltamivir (phosphate) is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of oseltamivir (phosphate) in these solvents is approximately 10 and 0.5 mg/ml, respectively.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. Organic solvent-free aqueous solutions of oseltamivir (phosphate) can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of oseltamivir (phosphate) in PBS (pH 7.2) is approximately 10 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

Oseltamivir is an antiviral prodrug targeted against the influenza viruses.^{1,2} Once hydrolyzed in the liver to its active metabolite, oseltamivir acid (Item No. 15779), it can competitively inhibit viral neuraminidase (IC₅₀s = 0.1- 4.9 nM for influenza neuraminidases A and B), blocking the release of new viral particles from a host cell.³⁻⁷

References

1. Sidwell, R.W., Huffman, J.H., Barnard, D.L., *et al. Antiviral Res.* **37(2)**, 107-120 (1998).
2. Hayden, F.G., Atmar, R.L., Schilling, M., *et al. N. Engl. J. Med.* **341(18)**, 1336-1343 (1999).
3. Li, W., Escarpe, P.S., Eisenberg, E.J., *et al. Antimicrob. Agents Chemother.* **42(3)**, 647-653 (1998).
4. Oliyai, R., Yuan, L.C., Dahl, T.C., *et al. Pharm. Res.* **15(8)**, 1300-1304 (1998).
5. Govorkova, E.A., Ilyushina, N.A., McClaren, J.L., *et al. Antimicrob. Agents Chemother.* **53(7)**, 3088-3096 (2009).
6. Krueger, A.C., Xu, Y., Kati, W.M., *et al. Bioorg. Med. Chem. Lett.* **18(5)**, 1692-1695 (2008).
7. Lew, W., Wu, H., Chen, X., *et al. Bioorg. Med. Chem. Lett.* **10(11)**, 1257-1260 (2000).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

WARRANTY AND LIMITATION OF REMEDY

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

Copyright Cayman Chemical Company, 11/07/2022

CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA

PHONE: [800] 364-9897

[734] 971-3335

FAX: [734] 971-3640

CUSTSERV@CAYMANCHEM.COM

WWW.CAYMANCHEM.COM