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, Tamiflu®
MF: C_{16}H_{28}N_{2}O_{4} • H_{3}PO_{4}
FW: 410.4
Purity: ≥98%
Supplied as: A crystalline solid
Storage: -20°C
Stability: ≥2 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. Oseltamivir (phosphate) is soluble in organic solvents such as DMSO and dimethyl formamide, which should be purged with an inert gas. 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 (IC_{50} = 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