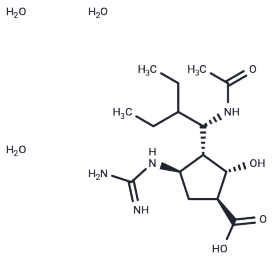
Data Sheet (Cat.No.T2522)

TargetMol

Peramivir Trihydrate

Chemical Properties



CAS No. : 1041434-82-5

Formula: C15H28N4O4·3H2O

Molecular Weight: 382.45

Appearance: no data available

Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year

Biological Description

Description	Peramivir Trihydrate (RWJ-270201) is a neuraminidase inhibitor (IC50: 0.09 nM) which prevents normal processing of virus particles such that virus particles are not released from infected cells. Peramivir Trihydrate is a cyclopentane derivative with activity against influenza A and B viruses.
Targets(IC50)	Influenza Virus
In vitro	When used in conjunction with favipiravir (20-40 mg/kg/day), peramivir (0.025-0.1 mg/kg/day) increases cell survival rates by 10-50%. At a dosage of 0.5 mg/kg/day, peramivir exhibits a protective effect against H1N1 in mice, covering about 30% of the virus. The combination of peramivir (1 mg/kg/day) with amantadine (5-10 mg/kg/day) results in weight losses of 1.69 and 0.69, respectively; however, for a sub-lethal influenza A (H3N2) virus model in mice, administering peramivir (3 mg/kg/day) alongside rimantadine (10-30 mg/kg/day) does not affect weight. At a higher concentration, peramivir (30 mg/kg) effectively extends the survival of mice infected with the systemically replicating H5N1 virus.

Solubility Information

Solubility	H2O: 6.6 mg/mL (17.26 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.6147 mL	13.0736 mL	26.1472 mL
5 mM	0.5229 mL	2.6147 mL	5.2294 mL
10 mM	0.2615 mL	1.3074 mL	2.6147 mL
50 mM	0.0523 mL	0.2615 mL	0.5229 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.

Reference

Yun NE, et al. Virology, 2008, 374(1), 198-209.
Smee DF, et al. Antiviral Res, 2010, 88(1), 38-44.
Boltz DA, et al. Antiviral Res, 2008, 80(2), 150-157.
Tarbet EB, et al. Antiviral Res, 2012, 94(1), 103-110.
Bantia S, et al. Antiviral Res, 2010, 88(3), 276-280.

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