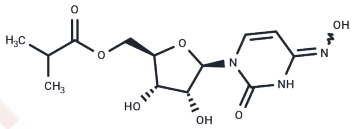
Data Sheet (Cat.No.T8309)

TargetMol

EIDD-2801

Chemical Properties



CAS No. : 2349386-89-4

Formula: C13H19N3O7

Molecular Weight: 329.31

Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year
Actual storage temperature shall be subject to the COA.

Biological Description

Description	EIDD-2801 (Molnupiravir) is an isopropylester prodrug of the ribonucleoside analog N 4-hydroxycytidine (EIDD-1931) that has shown broad influenza virus and multiple coronaviruses activity.
Targets(IC50)	Influenza Virus,SARS-CoV
In vivo	EIDD-2801 was orally bioavailable in ferrets and nonhuman primates.?Therapeutic oral dosing of influenza virus-infected ferrets reduced group pandemic 1 and group 2 seasonal influenza A shed virus load by multiple orders of magnitude and alleviated fever, airway epithelium histopathology, and inflammation, whereas postexposure prophylactic dosing was sterilizing[1].

Solubility Information

Solubility	DMSO: 242.5 mg/mL (736.39 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+90% Saline: 10 mg/mL (30.37 mM),Solution. 10% DMSO+40% PEG300+5% Tween 80+45% Saline: 2 mg/mL (6.07 mM),Sonication is recommended. *Please add the solvents sequentially, clarifying the solution as much as possible before adding the next one. Dissolve by heating and/or sonication if necessary. Working solution is recommended to be prepared and used immediately. The formulation provided above is for reference purposes only. In vivo formulations may vary and should be modified based on specific experimental conditions.*

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	3.0367 mL	15.1833 mL	30.3665 mL
5 mM	0.6073 mL	3.0367 mL	6.0733 mL
10 mM	0.3037 mL	1.5183 mL	3.0367 mL
50 mM	0.0607 mL	0.3037 mL	0.6073 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.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Reference

Toots M, et al. Characterization of orally efficacious influenza drug with high resistance barrier in ferrets and human airway epithelia. Sci Transl Med. 2019 Oct 23;11(515). pii: eaax5866.
Li Y, Liu M, Yan Y, et al. Molnupiravir and Its Active Form, EIDD-1931, Show Potent Antiviral Activity against Enterovirus Infections In Vitro and In Vivo. Viruses. 2022, 14(6): 1142
Mart Toots , Jeong-Joong Yoon , Michael Hart ,et al.Quantitative Efficacy Paradigms of the Influenza Clinical Drug Candidate EIDD-2801 in the Ferret Model.ransl Res. 2020 Apr;218:16-28.
Sheahan TP, et al. An orally bioavailable broad-spectrum antiviral inhibits SARS-CoV-2 in human airway epithelial cell cultures and multiple coronaviruses in mice. Sci Transl Med. 2020 Apr 6. pii: eabb5883.