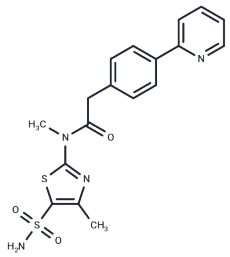
Data Sheet (Cat.No.T2504)

TargetMol

Pritelivir

Chemical Properties



CAS No. : 348086-71-5

Formula: C18H18N4O3S2

Molecular Weight: 402.49

Appearance: no data available

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

Biological Description

Description	Pritelivir (BAY 57-1293) (BAY 57-1293) is a potent helicase-primase inhibitor with active against HSV-1 and HSV-2 (IC50: 20 nM).
Targets(IC50)	HSV,DNA/RNA Synthesis
In vitro	In models of lethal disseminated herpes infection in mice and rats, as well as in a mouse model simulating the spread of shingles-like skin disease, BAY57-1293 (administered orally at doses of 0.5/15 mg/kg) exhibited potent antiviral activity. This compound also showed similar efficacy in a mouse model of ocular herpes.
In vivo	BAY57-1293 exhibits a dose-dependent direct inhibition of the viral helicase-primase complex's ATPase activity. It also demonstrates significant antiviral activity against acyclovir-resistant herpes simplex virus mutants. Additionally, in green monkey kidney cells, BAY57-1293 reduces the levels of Aβ and P-tau induced by herpes simplex virus type 1.
Kinase Assay	In vitro procaspase-3 activation: Procaspase-3 is expressed and purified in Escherichia coli. Various concentrations of PAC-1 are added to 90 μL of a 50 ng/mL of procaspase-3 in caspase assay buffer in a 96-well plate, The plate is incubated for 12 hours at 37 °C. A 10 μL volume of a 2 mM solution of caspase-3 peptidic substrate acetyl Asp-Glu-Val-Asp-p-nitroanilide (Ac-DEVD-pNa) in caspase assay buffer is then added to each well. The plate is read every 2 minutes at 405 nm for 2 hours in a Spectra Max Plus 384 well plate reader. The slope of the linear portion for each well is determined, and the relative increase in activation from untreated control wells is calculated.

Solubility Information

Solubility	H2O: < 1 mg/mL (insoluble or slightly soluble), Ethanol: < 1 mg/mL (insoluble or slightly soluble), DMSO: 21.67 mg/mL (53.84 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.4845 mL	12.4227 mL	24.8453 mL
5 mM	0.4969 mL	2.4845 mL	4.9691 mL
10 mM	0.2485 mL	1.2423 mL	2.4845 mL
50 mM	0.0497 mL	0.2485 mL	0.4969 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

Kleymann G, et al. Nat Med. 2002, 8(4), 392-398.
Betz UA, et al. Antimicrob Agents Chemother. 2002, 46(6), 1766-1772.
Wozniak MA, et al. Antiviral Res. 2013, 99(3), 401-404.