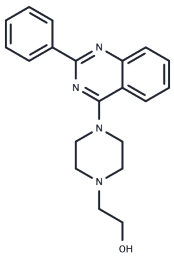
Data Sheet (Cat.No.T9103)

TargetMol

BVDV-IN-1

Chemical Properties



CAS No. : 345651-04-9

Formula: C20H22N4O

Molecular Weight: 334.41

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	BVDV-IN-1 is a non-nucleoside inhibitor (NNI) of bovine viral diarrhea virus (BVDV) with an EC50 of 1.8 μM, directly binding to a hydrophobic pocket of the BVDV RdRp, and demonstrating antiviral activity against BVDV resistant to NNI thiosemicarbazone (TSC).
Targets(IC50)	Anti-infection,DNA/RNA Synthesis
In vitro	BVDV-IN-1?has antiviral activity against BVDV resistant to NNI thiosemicarbazone (TSC). It is a non-nucleoside inhibitor (NNI) of bovine viral diarrhea virus (BVDV), with an EC50 of 1.8 μM. It directly binds to a hydrophobic pocket of the BVDV RdRp.

Solubility Information

Solubility	DMSO: 250 mg/mL (747.59 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+40% PEG300+5% Tween 80+45% Saline: 5 mg/mL (14.95 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	2.9903 mL	14.9517 mL	29.9034 mL
5 mM	0.5981 mL	2.9903 mL	5.9807 mL
10 mM	0.299 mL	1.4952 mL	2.9903 mL
50 mM	0.0598 mL	0.299 mL	0.5981 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

Gabriela A Fernández, et al. Design and Optimization of Quinazoline Derivatives: New Non-nucleoside Inhibitors of Bovine Viral Diarrhea Virus. Front Chem. 2020 Dec 10;8:590235.