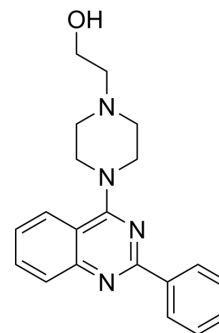


BVDV-IN-1

Cat. No.:	HY-131976
CAS No.:	345651-04-9
Molecular Formula:	C ₂₀ H ₂₂ N ₄ O
Molecular Weight:	334.41
Target:	DNA/RNA Synthesis
Pathway:	Cell Cycle/DNA Damage
Storage:	4°C, protect from light * In solvent : -80°C, 6 months; -20°C, 1 month (protect from light)



SOLVENT & SOLUBILITY

In Vitro	DMSO : 250 mg/mL (747.59 mM; Need ultrasonic)						
	Preparing Stock Solutions	Solvent Concentration	Mass	1 mg	5 mg	10 mg	
				1 mM	2.9903 mL	14.9517 mL	29.9034 mL
				5 mM	0.5981 mL	2.9903 mL	5.9807 mL
				10 mM	0.2990 mL	1.4952 mL	2.9903 mL
Please refer to the solubility information to select the appropriate solvent.							
In Vivo	1. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline Solubility: ≥ 2.08 mg/mL (6.22 mM); Clear solution						
	2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: ≥ 2.08 mg/mL (6.22 mM); Clear solution						
	3. Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 2.08 mg/mL (6.22 mM); Clear solution						

BIOLOGICAL ACTIVITY

Description	BVDV-IN-1 is a non-nucleoside inhibitor (NNI) of bovine viral diarrhea virus (BVDV), with an EC ₅₀ of 1.8 μM. BVDV-IN-1 directly binds to a hydrophobic pocket of the BVDV RdRp. BVDV-IN-1 has antiviral activity against BVDV resistant to NNI thiosemicarbazone (TSC) ^[1] .
In Vitro	BVDV-IN-1 (compound 1.9) binds to a hydrophobic pocket of the BVDV RNA-dependent RNA polymerase (RdRp) ^[1] . BVDV-IN-1 inhibits the replication of TSC-resistant BVDV variants in vitro ^[1] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. 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.

Caution: Product has not been fully validated for medical applications. For research use only.

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA