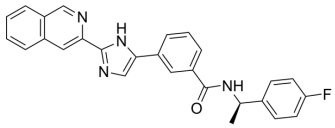
TTP-8307

Cat. No.:	HY-124806
CAS No.:	950225-08-8
Molecular Formula:	$C_{27}H_{21}FN_4O$
Molecular Weight:	436.48
Target:	Enterovirus; DNA/RNA Synthesis; HCV
Pathway:	Anti-infection; Cell Cycle/DNA Damage
Storage:	Powder -20°C 3 years 4°C 2 years In solvent -80°C 2 years -20°C 1 year



SOLVENT & SOLUBILITY

In Vitro

DMSO : 100 mg/mL (229.11 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent / Mass / Concentration	1 mg	5 mg	10 mg
	1 mM	2.2911 mL	11.4553 mL	22.9106 mL
	5 mM	0.4582 mL	2.2911 mL	4.5821 mL
	10 mM	0.2291 mL	1.1455 mL	2.2911 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: 2.5 mg/mL (5.73 mM); Suspended solution; Need ultrasonic
2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
   Solubility: 2.5 mg/mL (5.73 mM); Suspended solution; Need ultrasonic
3. Add each solvent one by one: 10% DMSO >> 90% corn oil
   Solubility: ≥ 2.5 mg/mL (5.73 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

TTP-8307 is a potent inhibitor of the replication of several rhino- and enteroviruses. TTP-8307 inhibits coxsackievirus B3 (CVB3; EC_{50}=1.2 μM) and poliovirus by interfering with the synthesis of viral RNA. TTP-8307 exerts antiviral activity through oxysterol-binding protein (OSBP)[1][2].

In Vitro

TTP-8307 targets the nonstructural protein 3A, inhibits the replication of coxsackievirus B3 (CVB3 Nancy) with EC_{50} of 1.2 μM. TTP-8307 inhibits the replication of coxsackievirus B3 and the three poliovirus Sabin strains, as well as coxsackieviruses A16 and A21 (EC_{50} of 0.85 and 5.34 μM). TTP-8307 inhibits human rhinoviruses (HRVs) 2, 29, 39, 45, 63, and 85. Mutations in

	the nonstructural protein 3A confer resistance to the novel enterovirus replication inhibitor TTP-8307[1]. TTP-8307 inhibits OSBP-dependent viruses encephalomyocarditis virus (EMCV) and HCV[2]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. De Palma AM, et al. Mutations in the nonstructural protein 3A confer resistance to the novel enterovirus replication inhibitor TTP-8307. Antimicrob Agents Chemother. 2009 May;53(5):1850-7.

[2]. Albulescu L, et al. Uncovering oxysterol-binding protein (OSBP) as a target of the anti-enteroviral compound TTP-8307. Antiviral Res. 2017 Apr;140:37-44.

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