HZ-1157

Cat. No.: HY-109571

CAS No.: 1009734-33-1

Molecular Formula: $C_{12}H_{16}N_4O$

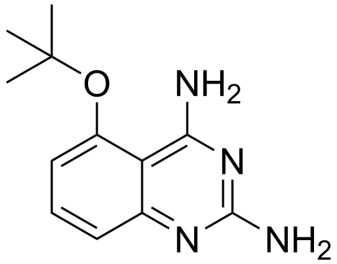
Molecular Weight: 232.28

Target: HCV Protease; Flavivirus; Dengue virus

Pathway: Anti-infection; Metabolic Enzyme/Protease

Storage:

Powder	-20°C	3 years
	4°C	2 years
In solvent	-80°C	6 months
	-20°C	1 month



SOLVENT & SOLUBILITY

In Vitro

DMSO : 20 mg/mL (86.10 mM; Need ultrasonic)

Preparing Stock Solutions	Mass / Solvent / Concentration	1 mg	5 mg	10 mg
	1 mM	4.3051 mL	21.5257 mL	43.0515 mL
	5 mM	0.8610 mL	4.3051 mL	8.6103 mL
	10 mM	0.4305 mL	2.1526 mL	4.3051 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 mg/mL (8.61 mM); Clear solution
2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
   Solubility: ≥ 2 mg/mL (8.61 mM); Clear solution
3. Add each solvent one by one: 10% DMSO >> 90% corn oil
   Solubility: ≥ 2 mg/mL (8.61 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

HZ-1157 inhibits HCV NS3/4A protease with an IC_{50} of 1.0 μmol/L. HZ-1157 (4a) has a high dengue virus inhibitory activity (EC_{50} = 0.15 μM) and is a relatively nontoxic (CC_{50} > 10 μM) dengue antiviral agent[1][2].

IC_{50} & Target

IC50: 1.0 μmol/L (HCV NS3/4A protease)[2].

In Vitro

HZ-1157 (4a) is known to possess a broad spectrum of biological activities, such as protein lysine methyltransferase G9a inhibition, SMN2 promoter activation, dihydrofolate reductase inhibition, and others[1][2].

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

Cell Viability Assay[2].

Cell Line:	HZ-1157 (4a) is known to possess a broad spectrum of biological activities, such as protein lysine methyltransferase G9a inhibition, SMN2 promoter activation, dihydrofolate reductase inhibition, and others.
Concentration:	0-10 μmol/L.
Incubation Time:	72 h.
Result:	Inhibited HCV infection in vitro with an IC_{50} of 0.82 μmol/L.

REFERENCES

[1]. Ye Yu, et al. Discovering Novel anti-HCV Compounds With Inhibitory Activities Toward HCV NS3/4A Protease. Acta Pharmacol Sin. 2014 Aug;35(8):1074-81.

[2]. Bo Chao, et al. Discovery and Optimization of 2,4-diaminoquinazoline Derivatives as a New Class of Potent Dengue Virus Inhibitors. J Med Chem . 2012 Apr 12;55(7):3135-43.

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