(+)-JNJ-A07

Cat. No.: HY-139602

CAS No.: 2135640-93-4

Molecular Formula: $C_{28}H_{26}ClF_3N_2O_6$

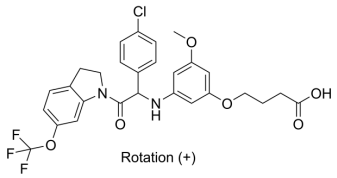
Molecular Weight: 578.96

Target: Virus Protease; Flavivirus; Dengue virus

Pathway: Anti-infection

Storage:

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



SOLVENT & SOLUBILITY

In Vitro

DMSO : 100 mg/mL (172.72 mM; Need ultrasonic)

Preparing Stock Solutions	Mass / Solvent / Concentration	1 mg	5 mg	10 mg
	1 mM	1.7272 mL	8.6362 mL	17.2724 mL
	5 mM	0.3454 mL	1.7272 mL	3.4545 mL
	10 mM	0.1727 mL	0.8636 mL	1.7272 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 (4.32 mM); Clear solution
2. Add each solvent one by one: 10% DMSO >> 90% corn oil
   Solubility: ≥ 2.5 mg/mL (4.32 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

(+)-JNJ-A07 is a highly potent, orally active pan-serotype dengue virus inhibitor targeting the NS3-NS4B interaction. (+)-JNJ-A07 exerts nanomolar to picomolar activity against a panel of 21 clinical isolates. (+)-JNJ-A07 has a favourable pharmacokinetic profile that results in outstanding efficacy against dengue virus infection in mouse infection models[1].

In Vitro

(+)-JNJ-A07 has a high barrier to resistance and prevents the formation of the viral replication complex by blocking the interaction between two viral proteins (NS3 and NS4B)[1].

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

REFERENCES

[1]. Kaptein SJF, et al. A pan-serotype dengue virus inhibitor targeting the NS3-NS4B interaction [published correction appears in Nature. 2021 Nov;599(7883):E2]. Nature. 2021;598(7881):504-509.

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