Proteins

Product Data Sheet

GS-9256

Cat. No.: HY-16593 CAS No.: 1001094-46-7

C₄₆H₅₆ClF₂N₆O₈PS Molecular Formula:

Molecular Weight: 957.46

Target: **HCV** Protease

Pathway: Anti-infection; Metabolic Enzyme/Protease

Please store the product under the recommended conditions in the Certificate of Storage:

Analysis.

BIOLOGICAL ACTIVITY

GS-9256 is a selective HCV NS3 protease inhibitor. GS-9256 has good pharmacokinetic properties and antiviral activity^[1]. Description

In Vitro $\text{GS-9256 (0.002-0.183}\,\mu\text{M}) \text{ has a mean EC}_{50} \text{ value of 20 nM in GT1b huh-luc cells with a replicon encoding luciferase}^{\text{[1]}}.$

GS-9256 (3 µM) retains wild-type activity against all NS5B and NS5A inhibitor-resistant mutations tested and is metabolically stable in microsomes and hepatocytes including rodents, dogs and humans[1].

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

In Vivo GS-9256 (1 mg/kg, i.v., 30 min) is highly bioavailable in mice (near 100%) and moderately bioavailable in rats (14%), dogs (21%) and monkeys (14%). The elimination half-life is approximately 2 hours in mice, 0.6 hours in rats, 5 hours in dogs, and 4 hours in monkeys^[1].

> The pharmacokinetic parameters of GS-9256(IV, 2 mg/kg mouse and 1 mg/kg rat, dog, monkey; Oral, 50 mg/kg mouse, 5 mg/kg rat and monkey, 4 mg/kg dog)

-	Parameters	CD-1 mouse	Sprague Dawley rat	Beagle dog	Cynomolgus monkey
Intravenous	CL(L/h/kg)	2.0	1.26	0.04	0.33
	Vss (L/kg)	2.3	0.16	0.09	0.27
	t _{1/2} (h)	2.35	0.61	4.88	3.95
	MRT(h)	1.15	0.13	2.11	0.82
Oral	T _{max} (h)	3.00	0.67	2.00	2.67
	C _{max} (nM)	11116	265	4369	604
	t _{1/2} (h)	1.31	0.53	4.22	4.42

AUC _{0-∞} (nM*h)	58959	445	21043	23
F(%)	Complete	13.0	21	1.

REFERENCES

[1]. Huiling Yang, et al. Preclinical characterization of the novel HCV NS3 protease inhibitor GS-9256. Antivir Ther. 2017;22(5):413-420.

 $\label{lem:caution:Product} \textbf{Caution: Product has not been fully validated for medical applications. For research use only.}$

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