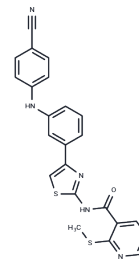


CHIKV-IN-5

Chemical Properties

CAS No. :	2568903-91-1
Formula:	C ₂₃ H ₁₇ N ₅ O ₂ S
Molecular Weight:	443.54
Storage:	Powder: -20°C for 3 years In solvent: -80°C for 1 year Actual storage temperature shall be subject to the COA.



Biological Description

Description	CHIKV-IN-5 (Compound 26) is an inhibitor of CHIKV with an EC ₉₀ value of 0.45 μM. It suppresses the replication of CHIKV in the later stages of the viral life cycle by blocking the translation of structural proteins. CHIKV-IN-5 demonstrates high stability in vitro within mouse microsomes. In infected mice, it alleviates footpad swelling and reduces the spread of the virus to other tissues.
Targets(IC ₅₀)	Anti-infection,Others
In vitro	CHIKV-IN-5 demonstrates a significant reduction in viral titer in normal human dermal fibroblasts (NHDF) at a concentration of 10 μM, achieving a VTR of 8.7 log, and exhibits stability in vitro in mouse microsomes (MLM t _{1/2} of 74 min). It prevents CHIKV replication post-entry in NHDF cells after 2 hours of exposure at 10 μM. Additionally, pretreatment with CHIKV-IN-5 (10 μM for 1 hour) inhibits the synthesis of CHIKV structural proteins in infected NHDF cells without affecting viral transcription.
In vivo	Administered at 80 mg/kg via intraperitoneal injection twice daily for 3 days, CHIKV-IN-5 alleviates footpad swelling in CHIKV-infected mice and significantly reduces viral spread to other tissues. Additionally, CHIKV-IN-5 demonstrates good metabolic stability in male C57BL/6 mice at doses ranging from 0.5 to 20 mg/kg through intraperitoneal, intravenous, oral, and subcutaneous routes.

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.2546 mL	11.2729 mL	22.5459 mL
5 mM	0.4509 mL	2.2546 mL	4.5092 mL
10 mM	0.2255 mL	1.1273 mL	2.2546 mL
50 mM	0.0451 mL	0.2255 mL	0.4509 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

This product is for Research Use Only · Not for Human or Veterinary or Therapeutic Use

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