Proteins

Product Data Sheet

NITD-2

Cat. No.: HY-134665 1197896-79-9 CAS No.: Molecular Formula: $C_{23}H_{19}N_3O_4S$ Molecular Weight: 433.48

Target: DNA/RNA Synthesis; Flavivirus; Dengue virus Pathway: Cell Cycle/DNA Damage; Anti-infection

Storage: Powder -20°C 3 years 4°C 2 years

-80°C 6 months In solvent -20°C 1 month

SOLVENT & SOLUBILITY

DMSO: 100 mg/mL (230.69 mM; Need ultrasonic) In Vitro

Preparing Stock Solutions	Solvent Mass Concentration	1 mg	5 mg	10 mg
	1 mM	2.3069 mL	11.5346 mL	23.0691 mL
	5 mM	0.4614 mL	2.3069 mL	4.6138 mL
	10 mM	0.2307 mL	1.1535 mL	2.3069 mL

Please refer to the solubility information to select the appropriate solvent.

In Vivo 1. Add each solvent one by one: 10% DMSO >> 90% corn oil

Solubility: ≥ 2.5 mg/mL (5.77 mM); Clear solution

BIOLOGICAL ACTIVITY

Description	NITD-2, a dengue virus (DENV) polymerase inhibitor, inhibits the DENV RdRp-mediated RNA elongation. NITD-2 penetrates cell membrane poorly $^{[1]}$.
In Vitro	NITD-2 inhibits de novo RNA synthesis $^{[1]}$. NITD-2 exhibited no antiviral activity in cell culture resulted from the poor cell penetratration $^{[1]}$.

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

REFERENCES

[1]. Pornwaratt Niyomrattanakit, et al. Inhibition of dengue virus polymerase by blocking of the RNA tunnel. J Virol. 2010 Jun;84(11):5678-86.

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

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