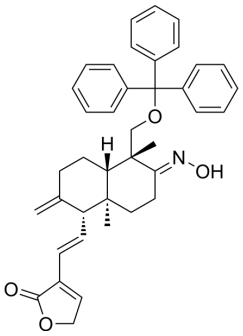
ZIKV-IN-3

Cat. No.:	HY-151446
CAS No.:	947699-46-9
Molecular Formula:	$C_{39}H_{41}NO_4$
Molecular Weight:	587.75
Target:	DNA Methyltransferase; Virus Protease; Flaviviridae
Pathway:	Epigenetics; Anti-infection
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	ZIKV-IN-3 (compound 5a), an andrographolide derivatives, is a potent ZIKV NS5 methyl transferase (MTase) inhibitor with an IC_{50} value of 18.34 μM. ZIKV-IN-3 inhibits ZIKV replication and infection. ZIKV-IN-3 can be used in research of Zika virus (ZIKV)[1].
IC_{50} & Target	IC50: 18.34 μM (MTase)[1]
In Vitro	ZIKV-IN-2 (compound 5a; 0.08-50 μM) inhibits ZIKV-induced plaque formation with an EC_{50} value of 0.76 μM and has anti-ZIKV effect with EC_{50} values of 0.48, 0.37, and 0.45 μM for Vero, Huh7 and A549 cells, respectively[1]. ZIKV-IN-2 (0.08-50 μM; 48 h) inhibits the expression of ZIKV E protein with an EC_{50} value of 0.38 μM and inhibits ZIKV replication and infection[1]. ZIKV-IN-2 (0.08-50 μM; 96 h) has low cytotoxicity in Vero, Huh7 and A549 cells[1].Vero, Huh7 and A549 cells[1]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.

Cell Viability Assay[1]

Cell Line:	Vero, Huh7 and A549 cells
Concentration:	0.08, 0.4, 2, 10, and 50 μM
Incubation Time:	96 hours
Result:	Exhibited low cytotoxicities to Vero cells, Huh7 cells and A549 cells with CC_{50}>200 μM to all three cell lines.

Western Blot Analysis[1]

Cell Line:	Vero cells
Concentration:	0.08, 0.4, 2, 10, and 50 μM
Incubation Time:	48 hours
Result:	Inhibited the expression of ZIKV E protein in a dose-dependent manner.

REFERENCES

[1]. Qian W, et al. Discovery of dehydroandrographolide derivatives with C19 hindered ether as potent anti-ZIKV agents with inhibitory activities to MTase of ZIKV NS5. Eur J Med Chem. 2022 Aug 27;243:114710.

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