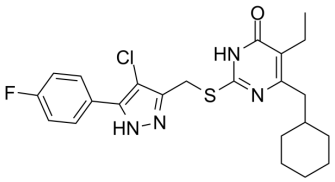
DENV-IN-6

Cat. No.:	HY-143273
CAS No.:	2375780-95-1
Molecular Formula:	$C_{23}H_{26}ClFN_4OS$
Molecular Weight:	461
Target:	HIV; DNA/RNA Synthesis
Pathway:	Anti-infection; Cell Cycle/DNA Damage
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description

DENV-IN-6 is a potent DENV (I-IV) inhibitor with EC_{50}s of 17.5, 13.20, 6.8 and 11.41 μM for the inhibition of DENV (I-IV) replication, respectively. DENV-IN-6 also exhibits activity of anti-HIV-1_{IIIB} (EC_{50}=0.0181 μM; CC_{50}=64.92 μM)[1].

IC_{50} & Target

HIV (IIIB)

In Vitro

DENV-IN-6 (compound 4a) (0.04, 0.2, 1, 5, 25 μM; 5 days) shows inhibitory effect on replication of DENV (I-IV) in a dose-dependent manner (EC_{50}s=17.5, 13.20, 6.8 and 11.41 μM, respectively)[1].

DENV-IN-6 (25 μM; 5 days) shows low toxic to Vero cells (CC_{50}>200 μM) and exhibits stronger inhibitory effect on DENV-III than on DENV-I, II, IV with a TI value is greater than 29.41 (Therapeutic index (TI): ratio CC_{50}/IC_{50})[1].

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

Cell Viability Assay[1]

Cell Line:	Vero cells
Concentration:	0.04, 0.2, 1, 5, 25 μM
Incubation Time:	5 days
Result:	Surpressed replication of DENV (I-IV) in a dose-dependent manner and with EC_{50}s of 17.5, 13.20, 6.8 and 11.41 μM, respectively.

Cell Cytotoxicity Assay[1]

Cell Line:	Vero cells
Concentration:	25 μM
Incubation Time:	5 days
Result:	Exhibited low toxic to Vero cells with a CC_{50} value was greater than 200 μM. Showed stronger inhibitory effect on DENV-III than on DENV-I, II, IV (Therapeutic index (TI) values of DENV (I-IV):>11.43, >15.15, >29.41, >17.53).

REFERENCES

[1]. Rui RM, et al. C6-structural optimizations of 2-aryl-1H-pyrazole-S-DABOs: From anti-HIV to anti-DENV activity. Bioorg Chem. 2022 Feb;119:105494.

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