SARS-CoV-2-IN-28 disodium

Cat. No.: HY-151274A

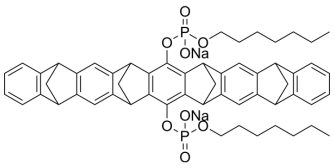
Molecular Formula: $C_{56}H_{58}Na_2O_8P_2$

Molecular Weight: 966.98

Target: SARS-CoV

Pathway: Anti-infection

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



BIOLOGICAL ACTIVITY

Description	SARS-CoV-2-IN-28 disodium is a two-armed diphosphate ester with C7 alkyl and molecular tweezers with extended length. SARS-CoV-2-IN-28 disodium exhibits antiviral activity with IC_{50}s of 0.4 μM and 1.0 μM against SARS-CoV-2 activity and the spike pseudoparticle transduction, respectively. SARS-CoV-2-IN-28 disodium induces liposomal membrane disruption with an EC_{50} value of 4.4 μM[1].
IC_{50} & Target	IC50: 4.4 μM (viral liposome, SARS-CoV-2)[1]
In Vitro	SARS-CoV-2-IN-28 (CP020) disodium inhibits SARS-CoV-2 (IC_{50}=1.0 μM) with few cytotoxicity (Caco2 cells, CC_{50}=213.1 μM)[1]. SARS-CoV-2-IN-28 disodium (0-15 μM; 2 h) inactivate SARS-CoV-2, shows inhibition against infection with an IC_{50} value of 0.4 μM[1]. SARS-CoV-2-IN-28 disodium suppresses varies enveloped viruses activity with IC_{50}s of 7.1 μM (respiratory syncytial virus, RSV), 24.5 μM (influenza A virus, IAV), 4.0 μM (measles virus, MeV), 1.6 μM (herpes simplex viruses, HSV-1), respectively[1]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.

Cell Viability Assay[1]

Cell Line:	Caco2 cells exposed with SARS-CoV-2 (2 h, 37 ⊠)
Concentration:	0, 0.23, 0.93, 3.75, 15 μM
Incubation Time:	2 hours; determined infection rates on day 2
Result:	Inhibited SARS-CoV-2 infection activity to Caco2 cells.

REFERENCES

[1]. Tatjana Weil, et al. Advanced Molecular Tweezers with Lipid Anchors against SARS-CoV-2 and Other Respiratory Viruses. JACS Au 2022, XXXX, XXX, XXX-XXX.

Caution: Product has not been fully validated for medical applications. For research use only.

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