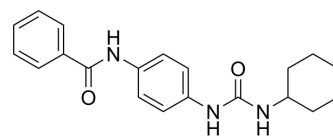


DS-22-inf-021

Cat. No.:	HY-163364
CAS No.:	945170-74-1
Molecular Formula:	C ₂₀ H ₂₃ N ₃ O ₂
Molecular Weight:	337.42
Target:	Influenza Virus
Pathway:	Anti-infection
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	DS-22-inf-021 is a neuraminidase (NA) inhibitor. DS-22-inf-021 has antiviral activity against influenza viruses ^[1] .
In Vitro	DS-22-inf-021 inhibits NA activity of IBV (B/Samara/32/2018 Yamagata lineage) and resistant IAV A/Vladivostok/2/2009 (H1N1 pdm09) carrying the H275Y mutation, with IC ₅₀ values of 9.1 μM and 14.7 μM, respectively ^[1] . DS-22-inf-021 (0.5-50 μM, 10 h) shows antiviral activity in MDCK cells were infected with IAV and IBV strains ^[1] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.
In Vivo	DS-22-inf-021 (20-100 mg/kg, i.p., twice daily for 5 days and monitored for 14 days.) increased survival rate in mice infected with IAV and IBV ^[1] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.
Animal Model:	8-week-old female BALB/c mice, intranasally inoculated with 50 μL of five 50 % mouse lethal doses of IAV and IBV ^[1] .
Dosage:	20, 50 and 100 mg/kg
Administration:	After 2 h post-infection, i.p. injection
Result:	Reached 85 % protection at 100 mg/kg dose. For the B/Samara/32/2018 strain, it was observed that 100 % of mice treated with DS-22-inf-021 at 100 mg/kg.

REFERENCES

[1]. Izmailyan R, et al. Discovery of new antiviral agents through artificial intelligence: In vitro and in vivo results. Antiviral Res. 2024 Feb;222:105818.

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

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