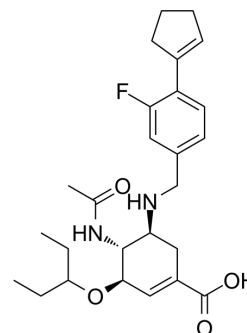


Neuraminidase-IN-16

Cat. No.:	HY-149088
Molecular Formula:	C ₂₆ H ₃₅ FN ₂ O ₄
Molecular Weight:	458.57
Target:	Influenza Virus
Pathway:	Anti-infection
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	Neuraminidase-IN-16 (Compound 43b) is a potent neuraminidase inhibitor with IC ₅₀ s of 0.031, 0.15, 0.25, 0.60, 0.63 and 10.08 μM against neuraminidase of H5N1, H5N8, H1N1, H3N2, H5N1-H274Y and H1N1-H274Y, respectively ^[1] .
In Vitro	Neuraminidase-IN-16 (Compound 43b; 48 h) shows anti-influenza virus activity with EC ₅₀ s of 2.10±0.44 μM and 2.28±0.67 μM for H5N1 and H5N8, respectively in Chicken Embryo Fibroblast cells (CEFs) ^[1] . Neuraminidase-IN-16 (48 h) shows anti-influenza virus activity with EC ₅₀ s of 0.20±0.01 μM and 11.3±2.5 μM for H1N1 and H3N2, respectively in MDCK cells ^[1] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.
In Vivo	Neuraminidase-IN-16 (Compound 43b; 0.039-10 mM; 100 uL) shows anti-influenza virus activity in specific pathogen free (SPF) chicken embryonated egg ^[1] . Neuraminidase-IN-16 has no ability to pass through the blood-brain barrier ^[1] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.
Animal Model:	SPF chicken embryonated egg infected with H5N1 and H5N8 virus strains ^[1]
Dosage:	0.039, 0.156, 0.625, 2.5 and 10 mM; 100 uL
Administration:	A 1 mm diameter hole was drilled into the egg shell on the side where the embryo was located, the mixture was injected into the egg, and the holes were sealed by wax.
Result:	Showed 100% protective effect at the highest tested concentration (10 mM).

REFERENCES

[1]. Jia R, et al. Discovery of N-substituted oseltamivir derivatives as novel neuraminidase inhibitors with improved drug resistance profiles and favorable drug-like properties. *Eur J Med Chem.* 2023 Apr 5;252:115275.

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

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA