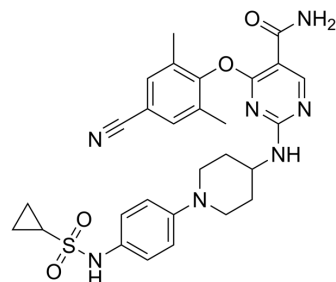


Reverse transcriptase-IN-3

Cat. No.:	HY-151938
Molecular Formula:	C ₂₈ H ₃₁ N ₇ O ₄ S
Molecular Weight:	561.66
Target:	HIV
Pathway:	Anti-infection
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	Reverse transcriptase-IN-3 is a pyrimidine-5-carboxamide derivative, acts as an inhibitor of HIV-1. Reverse transcriptase-IN-3 shows potent activity against the HIV-1 wild-type and mutant strains ^[1] .			
IC₅₀ & Target	HIV (IIIB) 8 nM (EC50)	HIV-1 (L100I) 65 nM (EC50)	HIV-1 (K103N) 9 nM (EC50)	HIV-1 (Y181C) 45 nM (EC50)
	HIV-1 (Y188L) 35 nM (EC50)	HIV-1 (E138K) 0.734 μM (EC50)	HIV-1 (F227L+V106A) 34 nM (EC50)	HIV-1 (RES056) 42 nM (EC50)
In Vitro	Reverse transcriptase-IN-3 (compound 21c) exhibits the most potent activity (EC ₅₀ =0.009-0.065 μM) against HIV-1 IIIB (8 nM), L100I (65 nM), K103N (9 nM), Y181C (45 nM), Y188L (35 nM), and RES056 (42 nM), being comparable of Etravirine (HY-90005) ^[1] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.			

REFERENCES

[1]. Feng D, et al. Disubstituted pyrimidine-5-carboxamide derivatives as novel HIV-1 NNRTIs: Crystallographic overlay-based molecular design, synthesis, and biological evaluation. *Eur J Med Chem.* 2022 Nov 22;246:114957.

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