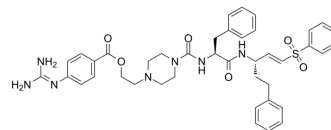


CTSL/B-IN-1

Cat. No.:	HY-163029
Molecular Formula:	C ₄₁ H ₄₇ N ₇ O ₆ S
Molecular Weight:	765.92
Target:	Cathepsin; SARS-CoV
Pathway:	Metabolic Enzyme/Protease; Anti-infection
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	CTSLCTSB-IN-1 (compound 212-148) is a bispecific inhibitor of host viral spike cleaver proteins CTSL/CTSB and TMPRSS2 with IC ₅₀ s of 2.13/64.07 nM and 1.38 μM, respectively. CTSLCTSB-IN-1 blocks two relevant SARS-CoV-2 viral entry pathways by inhibiting the viral spike cleavage and can be applied to anti-SARS-CoV-2 research ^[1] .
IC₅₀ & Target	IC ₅₀ : 1.38 μM (TMPRSS2) ^[1] , IC ₅₀ : 2.13/64.07 nM (CTSL/CTSB) ^[1]
In Vitro	CTSLCTSB-IN-1 (10 ⁻³ -10 ⁵ nM, 1h) shows significant antiviral efficacy in Calu-3 cells infected with clinical SARS-CoV-2 isolate Delta strain or omicron strain BA.2 ^[1] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Haitao Yang, et al. Structure-based discovery of dual pathway inhibitors for SARS-CoV-2 entry. Nat Commun., 2023;14:7574.

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

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