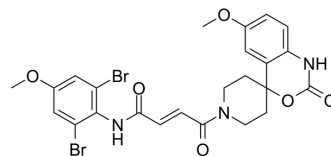


Chitin synthase inhibitor 10

Cat. No.:	HY-151420
CAS No.:	2725075-01-2
Molecular Formula:	C ₂₄ H ₂₃ Br ₂ N ₃ O ₆
Molecular Weight:	609.26
Target:	Fungal
Pathway:	Anti-infection
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	Chitin synthase inhibitor 10 is a chitin synthase inhibitor. Chitin synthase inhibitor 10 shows excellent chitin synthase inhibitory activity with an IC ₅₀ value of 0.11 mM. Chitin synthase inhibitor 10 also is an antifungal agent and has significantly antifungal activity against drug-resistant fungal variants, such as <i>C. albicans</i> and <i>C. neoformans</i> . Chitin synthase inhibitor 10 can be used for the research of invasive fungal infections (IFIs) ^[1] .
IC₅₀ & Target	IC ₅₀ : 0.11 mM (chitin synthase) ^[1] MIC: 64 µg/mL (<i>C. albicans</i>); 256 µg/mL (<i>A. flavus</i>); 128 µg/mL (<i>A. fumigatus</i>); 64 µg/mL (<i>C. neoformans</i>) ^[1]
In Vitro	Chitin synthase inhibitor 10 (compound 9o) (300 µg/mL) has good inhibitory activity against chitin synthase with with an IC ₅₀ value of 0.11 mM ^[1] . Chitin synthase inhibitor 10 has antifungal activity for <i>C. albicans</i> , <i>A. flavus</i> , <i>A. fumigatus</i> and <i>C. neoformans</i> with MIC values of 64 µg/mL, 256 µg/mL, 128 µg/mL and 64 µg/mL, respectively ^[1] . Chitin synthase inhibitor 10 is related to the disruption of cell wall architecture ^[1] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Yajie Xu, et al. Spiro[benzoxazine-piperidin]-one derivatives as chitin synthase inhibitors and antifungal agents: Design, synthesis and biological evaluation. *Eur J Med Chem.* 2022 Aug 31;243:114723.

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

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