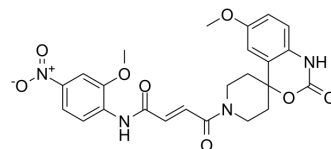


## Chitin synthase inhibitor 11

Cat. No.:	HY-151421
CAS No.:	2725075-04-5
Molecular Formula:	C <sub>24</sub> H <sub>24</sub> N <sub>4</sub> O <sub>8</sub>
Molecular Weight:	496.47
Target:	Fungal
Pathway:	Anti-infection
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



### BIOLOGICAL ACTIVITY

<b>Description</b>	Chitin synthase inhibitor 11 is a chitin synthase inhibitor. Chitin synthase inhibitor 11 shows excellent chitin synthase inhibitory activity with an IC <sub>50</sub> value of 0.10 mM. Chitin synthase inhibitor 11 has broad-spectrum antifungal activity in vitro. Chitin synthase inhibitor 11 can be used for the research of invasive fungal infections (IFIs) <sup>[1]</sup> .
<b>IC<sub>50</sub> &amp; Target</b>	IC <sub>50</sub> : 0.10 mM (chitin synthase) <sup>[1]</sup> MIC: 128 µg/mL (C. albicans); 42.67 µg/mL (A. flavus); 64 µg/mL (A. fumigatus); 64 µg/mL (C. neoformans) <sup>[1]</sup>
<b>In Vitro</b>	Chitin synthase inhibitor 11 (compound 9s) (300 µg/mL) has good inhibitory activity against chitin synthase with with an IC <sub>50</sub> value of 0.10 mM <sup>[1]</sup> . Chitin synthase inhibitor 11 has antifungal activity for C. albicans, A. flavus, A. fumigatus and C. neoformans with MIC values of 128µg/mL, 42.67 µg/mL, 64 µg/mL and 64 µg/mL, respectively <sup>[1]</sup> . Chitin synthase inhibitor 11 has broad-spectrum antifungal activity in vitro and has additive or synergistic effects combined with fluconazole <sup>[1]</sup> . 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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