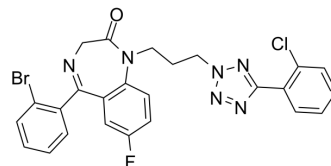


## Antifungal agent 84

Cat. No.:	HY-143334
CAS No.:	2901064-07-9
Molecular Formula:	C <sub>25</sub> H <sub>19</sub> BrClFN <sub>6</sub> O
Molecular Weight:	553.81
Target:	Fungal
Pathway:	Anti-infection
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



### BIOLOGICAL ACTIVITY

Description	Antibacterial agent 84 is an antifungal compound. Antibacterial agent 84 inhibits candidiasis in a CNB1-dependent way. Antibacterial agent 84 inhibits the <i>C. albicans</i> biofilm's viability <sup>[1]</sup> .								
In Vitro	<p>Antibacterial agent 84 (compound 6d) (1-16 µg/mL) inhibits human pathogen <i>C. albicans</i> SC5314 growth<sup>[1]</sup>.</p> <p>Antibacterial agent 84 (16 µg/mL, 18 h) induces endogenous reactive oxygen species (ROS) production in <i>C. albicans</i> in a CNB1-dependent way<sup>[1]</sup>.</p> <p>Antibacterial agent 84 (16 µg/mL, 18 h) is cytotoxic against lysosomal membrane permeabilization in <i>C. albicans</i><sup>[1]</sup>.</p> <p>Antibacterial agent 84 (16 µg/mL, 18 h) induces <i>C. albicans</i> phagocytosis by macrophages<sup>[1]</sup>.</p> <p>Antibacterial agent 84 (0.06-32 µg/mL) inhibits ergosterol synthesis in in cultures of <i>C. albicans</i> and <i>C. tropicalis</i><sup>[1]</sup>.</p> <p>MCE has not independently confirmed the accuracy of these methods. They are for reference only.</p> <p>Cell Viability Assay<sup>[1]</sup></p> <table border="1"> <tr> <td>Cell Line:</td> <td><i>C. albicans</i> (SC5314)</td> </tr> <tr> <td>Concentration:</td> <td>1-16 µg/mL</td> </tr> <tr> <td>Incubation Time:</td> <td>18 or 48 h</td> </tr> <tr> <td>Result:</td> <td>Inhibited <i>C. albicans</i> SC5314 growth by nearly 100%.</td> </tr> </table>	Cell Line:	<i>C. albicans</i> (SC5314)	Concentration:	1-16 µg/mL	Incubation Time:	18 or 48 h	Result:	Inhibited <i>C. albicans</i> SC5314 growth by nearly 100%.
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Result:	Inhibited <i>C. albicans</i> SC5314 growth by nearly 100%.								
In Vivo	<p>Antibacterial agent 84 (16 µg/mL, injected into the right pro-leg) aids in the clearance of fungi 1 h post-infection in <i>G. mellonella</i> larvae infected by <i>C. albicans</i><sup>[1]</sup>.</p> <p>MCE has not independently confirmed the accuracy of these methods. They are for reference only.</p> <table border="1"> <tr> <td>Animal Model:</td> <td><i>G. mellonella</i> larvae infected by <i>C. albicans</i><sup>[1]</sup></td> </tr> <tr> <td>Dosage:</td> <td>16 µg/mL</td> </tr> <tr> <td>Administration:</td> <td>Injected into the right pro-leg of the last instar larvae.</td> </tr> <tr> <td>Result:</td> <td>Realized the clearance of fungi 1 h post-infection.</td> </tr> </table>	Animal Model:	<i>G. mellonella</i> larvae infected by <i>C. albicans</i> <sup>[1]</sup>	Dosage:	16 µg/mL	Administration:	Injected into the right pro-leg of the last instar larvae.	Result:	Realized the clearance of fungi 1 h post-infection.
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Result:	Realized the clearance of fungi 1 h post-infection.								

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## REFERENCES

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[1]. Staniszewska M, et al. Tetrazole derivatives bearing benzodiazepine moiety-synthesis and action mode against virulence of Candida albicans. Eur J Med Chem. 2022 Feb 15;230:114060.

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

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