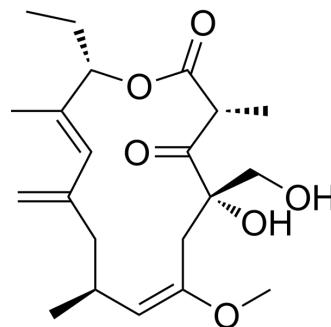


Rustmicin

Cat. No.:	HY-113637
CAS No.:	100227-57-4
Molecular Formula:	C ₂₁ H ₃₂ O ₆
Molecular Weight:	380.48
Target:	Fungal
Pathway:	Anti-infection
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	Rustmicin (Galbonolide A) is a potent antifungal agent. Rustmicin inhibits inositol phosphoceramide synthase. Rustmicin shows antifungal activity ^[1] .								
In Vitro	Rustmicin (0-32 µg/mL; 24-48 h) shows antifungal activity with MICs of 0.002, 0.001, 0.0001, 0.0002, 0.015, 0.015, 0.031, 0.031 µg/mL for <i>Cryptococcus neoformans</i> MY1051, <i>Cryptococcus neoformans</i> MY1146, <i>Cryptococcus neoformans</i> MY2061, <i>Cryptococcus neoformans</i> MY2062, <i>C. parapsilosis</i> (MY1010), <i>C. pseudotropicalis</i> (MY2099), <i>C. krusei</i> (MY549), <i>C. tropicalis</i> (MY1012) strain, respectively ^[1] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.								
In Vivo	Rustmicin (0, 10, 20, 40, 80 mg/kg; i.p.; twice daily for 4 days) shows antifungal activity in mouse model for cryptococcosis ^[1] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.								
	<table border="1"> <tr> <td>Animal Model:</td> <td>DBA/2N mice (<i>Cryptococcus neoformans</i> MY2061)^[1]</td> </tr> <tr> <td>Dosage:</td> <td>0, 10, 20, 40, 80 mg/kg</td> </tr> <tr> <td>Administration:</td> <td>I.p.; twice daily for 4 days</td> </tr> <tr> <td>Result:</td> <td>Showed a dose-dependent reduction in colony-forming units isolated from spleen and brain tissue of mice, with the ED₉₉ value of 29 mg/kg for both tissues.</td> </tr> </table>	Animal Model:	DBA/2N mice (<i>Cryptococcus neoformans</i> MY2061) ^[1]	Dosage:	0, 10, 20, 40, 80 mg/kg	Administration:	I.p.; twice daily for 4 days	Result:	Showed a dose-dependent reduction in colony-forming units isolated from spleen and brain tissue of mice, with the ED ₉₉ value of 29 mg/kg for both tissues.
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REFERENCES

[1]. Mandala SM, et al. Rustmicin, a potent antifungal agent, inhibits sphingolipid synthesis at inositol phosphoceramide synthase. *J Biol Chem*. 1998 Jun 12;273(24):14942-9.

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

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