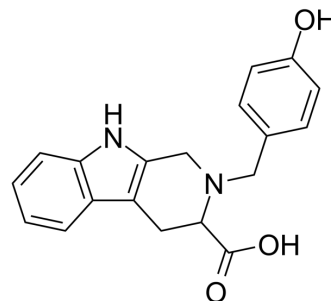


Callophycin A

Cat. No.:	HY-146190
CAS No.:	1345674-93-2
Molecular Formula:	C ₁₉ H ₁₈ N ₂ O ₃
Molecular Weight:	322.36
Target:	Bacterial; Antibiotic
Pathway:	Anti-infection
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	Callophycin A, a red seaweed derived metabolite, possessing potent activity against <i>Candida albicans</i> with MIC of 62.5~250 mg/L. Callophycin A significantly reduces fungal burden of vaginal candidiasis induced mice, also decreases inflammatory response and immune molecules ^[1] .								
IC₅₀ & Target	MIC: 62.5~250 mg/L (<i>Candida albicans</i>) ^[1]								
In Vivo	<p>Callophycin A (1%; for 5 days) dramatically reduces CFU of <i>Candida albicans</i>; and significantly reduces the amount of IL-6, IL-12, IL-17 and IL-22 compared with disease control group^[1].</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>Female Swiss albino mice (infected with <i>Candida albicans</i>)^[1]</td> </tr> <tr> <td>Dosage:</td> <td>1%</td> </tr> <tr> <td>Administration:</td> <td>For 5 days</td> </tr> <tr> <td>Result:</td> <td>Dramatically reduces CFU of <i>Candida albicans</i> from about 400 to 100/ml; and significantly ($p < 0.001$) reduces the amount of IL-6 (2.71 ± 0.09 to 1.83 ± 0.03 pg/μl), IL-12 (7.33 ± 0.15 to 6.13 ± 0.15 pg/μl), IL-17 (17.83 ± 0.21 to 13.70 ± 0.2 pg/μl) and IL-22 (5.33 ± 0.25 to 4.20 ± 0.26 pg/μl) compared with disease control group.</td> </tr> </table>	Animal Model:	Female Swiss albino mice (infected with <i>Candida albicans</i>) ^[1]	Dosage:	1%	Administration:	For 5 days	Result:	Dramatically reduces CFU of <i>Candida albicans</i> from about 400 to 100/ml; and significantly ($p < 0.001$) reduces the amount of IL-6 (2.71 ± 0.09 to 1.83 ± 0.03 pg/ μ l), IL-12 (7.33 ± 0.15 to 6.13 ± 0.15 pg/ μ l), IL-17 (17.83 ± 0.21 to 13.70 ± 0.2 pg/ μ l) and IL-22 (5.33 ± 0.25 to 4.20 ± 0.26 pg/ μ l) compared with disease control group.
Animal Model:	Female Swiss albino mice (infected with <i>Candida albicans</i>) ^[1]								
Dosage:	1%								
Administration:	For 5 days								
Result:	Dramatically reduces CFU of <i>Candida albicans</i> from about 400 to 100/ml; and significantly ($p < 0.001$) reduces the amount of IL-6 (2.71 ± 0.09 to 1.83 ± 0.03 pg/ μ l), IL-12 (7.33 ± 0.15 to 6.13 ± 0.15 pg/ μ l), IL-17 (17.83 ± 0.21 to 13.70 ± 0.2 pg/ μ l) and IL-22 (5.33 ± 0.25 to 4.20 ± 0.26 pg/ μ l) compared with disease control group.								

REFERENCES

[1]. Arumugam Ganeshkumar, et al. New insight of red seaweed derived Callophycin A as an alternative strategy to treat drug resistance vaginal candidiasis. *Bioorg Chem.* 2020 Nov;104:104256.

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

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA