

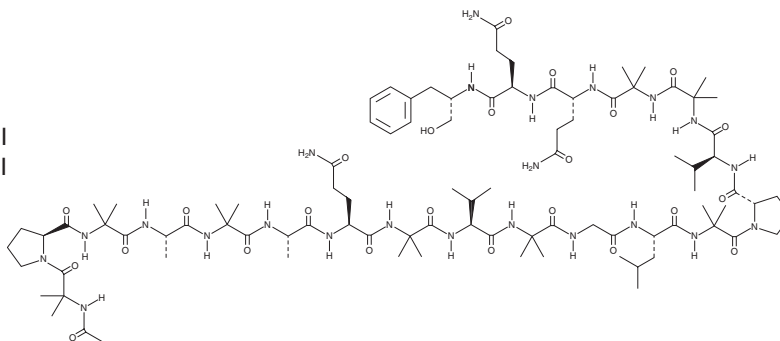
PRODUCT INFORMATION



Alamethicin F50

Item No. 23141

CAS Registry No.: 56165-93-6
Formal Name: 18-L-glutamine-alamethicin I
Synonym: 18-L-Glutamine Alamethicin I
MF: C₉₂H₁₅₁N₂₃O₂₄
FW: 1,963.3
Purity: ≥98%
Supplied as: A solid
Storage: -20°C
Stability: ≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

Alamethicin F50 is supplied as a solid. A stock solution may be made by dissolving the alamethicin F50 in the solvent of choice, which should be purged with an inert gas. Alamethicin F50 is soluble in organic solvents such as ethanol, methanol, DMSO, and dimethyl formamide.

Description

Alamethicin F50 is a peptaibol isolated from *Trichoderma*.¹ It is a polymer of 20 amino acids that includes modified and non-proteinogenic amino acids.² Alamethicin F50 is a mixture of 13 different peptides, with the most abundant designated as alamethicin F50/5. Alamethicin F50 forms voltage-dependent ion channels in lipid membranes and acts as a lytic agent.^{3,4} It induces lysis of leukocytes (IC₅₀ = 54 and 80 μM for rat mast cells and mouse spleen lymphocytes, respectively) and exhibits antibacterial activity against a panel of 8 mollicutes (MICs = 1.56-12.5 μM).

References

1. Meyer, C.E., and Reusser, F. A polypeptide antibacterial agent isolated from *Trichoderma viride*. *Experientia* **23**(2), 85-86 (1967).
2. Kirschbaum, J., Krause, C., Winzheimer, R.K., et al. Sequences of alamethicins F30 and F50 reconsidered and reconciled. *J. Pept. Sci.* **9**(11-12), 799-809 (2003).
3. Béven, L., Duval, D., Rebuffat, S., et al. Membrane permeabilisation and antimycoplasmic activity of the 18-residue peptaibols, trichorzins PA. *Biochim. Biophys. Acta* **1372**(1), 78-90 (1998).
4. Bessler, W.G., Ottenbreit, B., Irmscher, G., et al. Interaction of membrane modifying peptide antibiotics from *Trichoderma viride* with leukocytes. *Biochem. Biophys. Res. Commun.* **87**(1), 99-105 (1979).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the [complete](#) Safety Data Sheet, which has been sent via email to your institution.

WARRANTY AND LIMITATION OF REMEDY

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

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