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Product Information

Alamethicin
Ready Made Solution
from *Trichoderma viride*

Catalog Number **A5361** Storage Temperature –20 °C

CAS RN 27061-78-5 Synonym: U-22324

Product Description

Formula weight: 1964.45

Alamethicin is a 20-amino acid channel-forming peptide antibiotic isolated from the fungus Trichoderma viride. It consists of several isoforms, for which structural information has been published. Alamethicin forms voltage-dependent channels across lipid bilayer membranes. 1-4 The alamethicin channel is built by a bundle of helical monomers forming a water filled transmembrane pore. The conductivity level of the channel is determined by the number of associated helical monomers (3-12), which generate a non-aligned supermolecular structure with an aqueous core through which ions can cross lipid membranes.⁵⁻⁷ Alamethicin catalyzes the exchange of protons for monovalent cations with little difference in affinities1-4 and has the ability to transport cations through biological and artificial lipid membranes. Alamethicin can be used for the permeabilization of mitochondria without affecting the outer or inner membranes.8

This product contains a mixture of alamethicin isoforms. It is supplied as a 5 mg/mL, 0.2 μ m filtered solution in dimethyl sufoxide (DMSO).

Purity: ≥98% (HPLC)

Precautions and Disclaimer

This product is for R&D use only, not for drug, household, or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.

Storage/Stability

Store the solution sealed at –20 °C. Under these conditions the product is stable for at least 2 years.

References

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EM,KAA,DWF,MAM 01/13-1