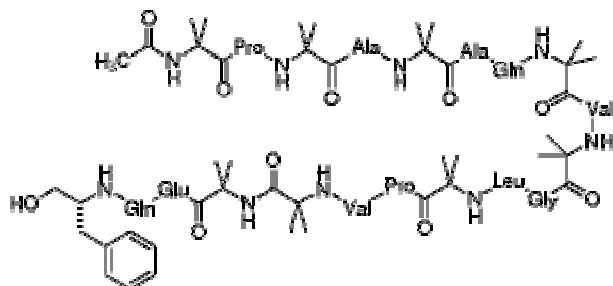


## Product Information

### Alamethicin Ready Made Solution from *Trichoderma viride*

Catalog Number **A5361**  
Storage Temperature 2–8 °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.<sup>1-4</sup> 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.<sup>5-7</sup> Alamethicin catalyzes the exchange of protons for monovalent cations with little difference in affinities<sup>1-4</sup> 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.<sup>8</sup>

This product contains a **mixture of alamethicin isoforms**. It is supplied as a 5 mg/mL, 0.2 µm filtered solution in dimethyl sulfoxide (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 2–8 °C. Under these conditions the product is stable for at least 2 years.

### References

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5. Kaduk, C., et al., Influence of proline position upon the ion channel activity of Alamethicin. *Biophys. J.*, **72**, 2151-2159 (1997).
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8. Gostimskaya, I.S., et al., *In situ* assay of the intramitochondrial enzymes: use of Alamethicin for permeabilization of mitochondria. *Anal Biochem.*, **313**, 46-52 (2003).

KAA,DWF,MAM 10/09-1

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