



MP Biomedicals, LLC

29525 Fountain Parkway  
Solon, Ohio 44139

Telephone: 440/337-1200  
Toll Free: 800/854-0530  
Fax: 440/337-1180  
mailto: [biotech@mpbio.com](mailto:biotech@mpbio.com)  
web: <http://www.mpbio.com>

## TECHNICAL INFORMATION

Catalog Number: 159009

### Alamethacin

**Molecular Formula:** C<sub>92</sub>H<sub>150</sub>N<sub>22</sub>O<sub>25</sub>

**Molecular Weight:** 1964.35

**CAS # :** 59588-86-2

**Synonym:** U-22324 Antibiotic

**Sequence:** Ac-2-MeAla-L-Pro-2-MeAla-L-Ala-2-MeAla-L-Ala-L-Glu-(NH<sub>2</sub>)-2-MeAla-L-Val-2-MeAla-Gly-L-Leu-2-MeAla-L-Pro-L-Val-2-MeAla-2-MeAla-L-Glu-L-Glu (NH<sub>2</sub>)-L-phenylalaninol

**Physical Description:** Off white powder

**Description:** Mixture of alamethicin homologs. Membrane permeabilizing antibiotic.<sup>1</sup> Applications include increasing [<sup>32</sup>P] incorporation into phosphatidylinositol 4-phosphate<sup>2</sup> and mermeabilization of sarcoplasmic reticulum vesicles.<sup>3</sup> Causes fusion of lipid vesicles.<sup>4</sup>

**Source:** *Trichoderma viride*

**Purity:** 50%

**Solubility:** Soluble in DMSO and ethanol. Store solutions at -20°C for up to 3 months.

### References:

- Brewer, D. et al., *Can. J. Microbiol.*, **v. 33**, 619 (1987).
- Quist, E. et al., *Arch. Biochem. Biophys.*, **v. 271**, 21 (1989).
- Nakagawa, M. and Willner, J.H., *J. Cyclic Nucleotide Protein Phosphor. Res.*, **v. 11**, 237 (1986).
- Review: Nagaraj, R. and Balaram, P., *Acc. Chem. Res.*, **v. 14**, 356 (1981).