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Product Information

Product ID N0075 CAS No. 7681-93-8

Chemical Name 16-(3-Amino-3,6-didesoxy-beta-D-mannopyranosyloxy)-5,6-

epoxy-8,12,14-trihydroxy-26-methyl-2,10-dioxo-1-

oxacyclohexacosa-3,17,19,21,23-pentaen-13-carbonsaeure Synonym Pimaricin, Tennecetin, Mycophyt, Myprozine, Natacyn,

Pimafucin.

Formula C₃₃H₄₇NO₁₃ Formula Wt. 665.73

Melting Point 280-300°C (dec)

Purity ≥98%

Solubility Soluble at 20°C in 87%

glycerol (0.18g/mL). Practically insoluble in higher alcohols.

Store Temp 4°C Ship Temp Ambient

Description Natamycin is a polyene macrolide found in *Streptomyces natalensis* that exhibits antifungal and immunostimulatory activities; this compound binds ergosterol, inhibiting membrane fusion. Natamycin is an antimicrobial compound that is clinically used to treat keratitis, displaying great efficacy against Aspergillus and Fusarium. Natamycin increases activation of the NALP3

inflammasome and secretion of IL-1B by inducing K+ efflux in dendritic cells; it also activates polyclonal B cells in mouse lymphocytes. Additionally, natamycin is used to improve the shelf life of cheese.

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Bulk quanitites available upon request

Product ID	Size
N0075	25 mg
N0075	50 mg
N0075	100 mg

References Kallinteri LD, Kostoula OK, Savvaidis IN. Efficacy of nisin and/or natamycin to improve the shelf-life of Galotyri cheese. Food Microbiol. 2013 Dec;36(2):176-81. PMID: 24010596.

> Thomas PA, Kaliamurthy J. Mycotic keratitis: epidemiology, diagnosis and management. Clin Microbiol Infect. 2013 Mar;19 (3):210-20. PMID: 23398543.

Darisipudi MN, Allam R, Rupanagudi KV, et al. Polyene macrolide antifungal drugs trigger interleukin-1B secretion by activating the NLRP3 inflammasome. PLoS One. 2011;6(5):e19588. PMID: 21625424.

Hammarström L, Smith CI. In vitro activating properties of polyene antibiotics for murine lymphocytes. Acta Pathol Microbiol Scand C. 1977 Aug; 85C(4): 277-83. PMID: 302553.

Caution: This product is intended for laboratory and research use only. It is not for human or drug use.