

**Catalog # 10-2742**

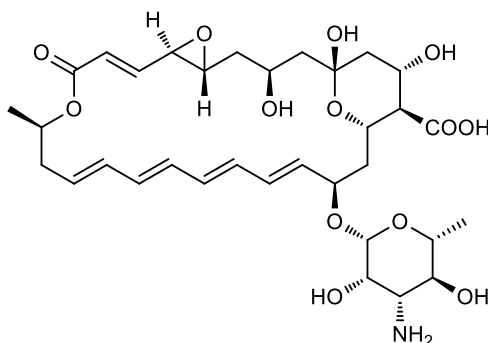
**Pimaricin**

7681-93-8

Natamycin

Fermentation product from *Streptomyces chattanoogensis*

Lot # X101910



Polyene macrolide topical antifungal agent. Specifically binds to ergosterol and inhibits fungal growth, not by forming pores in the plasma membrane (as is the case with other polyene macrolides such as amphotericin B)<sup>1</sup> but by inhibition of amino acid and glucose transport<sup>2</sup>. Blocks vacuole fusion at the priming phase via binding to ergosterol<sup>3</sup>.

- 1) te Welscher *et al.* (2008), *Natamycin blocks fungal growth by binding specifically to ergosterol without permeabilizing the membrane*; J. Biol. Chem., **283** 6393
- 2) te Welscher *et al.* (2012), *Polyene antibiotic that inhibits membrane transport proteins*; Proc. Natl. Acad. Sci. USA., **109** 11156
- 3) te Welscher *et al.* (2010), *Natamycin inhibits vacuole fusion at the priming phase via a specific interaction with ergosterol*; Antimicrob. Agents Chemother., **54** 2618

**PHYSICAL DATA**

Molecular Weight:	665.74
Molecular Formula:	C <sub>33</sub> H <sub>47</sub> NO <sub>13</sub>
Purity:	95% by TLC
	NMR: (Conforms)
Solubility:	DMSO (up to 7 mg/ml) , Ethanol (less than 1 mg/ml)
Physical Description:	Cream colored solid
Storage and Stability:	Store as supplied desiccated at -20°C for up to 1 year from the date of purchase. Solutions in DMSO or ethanol may be stored at -20°C for up to 1 week.

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