**PRODUCT INFORMATION**

**Natamycin**  
*Item No. 11634*

**CAS Registry No.:** 7681-93-8  
**Formal Name:** (5R,7R,24S)-22R-[(3S-amino-3,6-dideoxy-β-D-mannopyranosyl)oxy]-1R,3S,26S-trihydroxy-12R-methyl-10-oxo-6,11,28-troxtatricyclo[22.3.1.05,7]octacosa-8E,14E,16E,18E,20E-pentaene-25R-carboxylic acid  
**Synonyms:** Antibiotic A 5283, CL 12,625, Delvocid, E 235, Mycophyt, Myprozine, Pimaricin, Synogil, Tenecetin  
**MF:** C₃₃H₄₇NO₁₃  
**FW:** 665.7  
**Purity:** ≥95%  
**UV/Vis.:** λ_max: 219, 290, 303, 317 nm  
**Supplied as:** A crystalline solid  
**Storage:** -20°C  
**Stability:** As supplied, 2 years from the QC date provided on the Certificate of Analysis, when stored properly

**Laboratory Procedures**

Natamycin is supplied as a crystalline solid. A stock solution may be made by dissolving the natamycin in the solvent of choice. Natamycin is soluble in organic solvents such as methanol and DMSO, which should be purged with an inert gas. The solubility of natamycin in these solvents is approximately 1 mg/ml.

Natamycin is sparingly soluble in aqueous solutions. To enhance aqueous solubility, dilute the organic solvent solution into aqueous buffers or isotonic saline. If performing biological experiments, ensure the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. We do not recommend storing the aqueous solution for more than one day.

**Description**

Natamycin is a naturally-occurring macrolide polyene antifungal agent produced during fermentation by the bacterium *S. natalensis*, commonly found in soil. With minimal inhibitory concentrations ranging from 4-64 μM, natamycin is used to treat fungal infections, including *Candida*, *Aspergillus*, *Cephalosporium*, *Fusarium*, and *Penicillium*.¹-³ Natamycin blocks fungal growth by binding specifically to ergosterol with an apparent affinity of ~100 μM, but it does not permeabilize cell membranes as other polyene antibiotics are known to do.² Natamycin is also used in the food industry as a "natural" preservative.⁴

**References**