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-mannopyranosyloxy)-1R,3S,26S-trihydroxy-12R-methyl-10-oxo-6,11,28-trioxatricyclo[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, Tenecectin
MF: C33H47NO13
FW: 665.7
Purity: ≥95%
UV/Vis.: λmax: 219, 290, 303, 317 nm
Supplied as: A crystalline solid
Storage: -20°C
Stability: ≥2 years

Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

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.

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 preservative.4

References