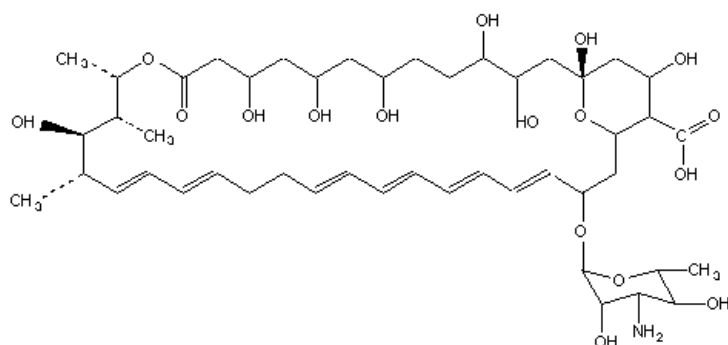
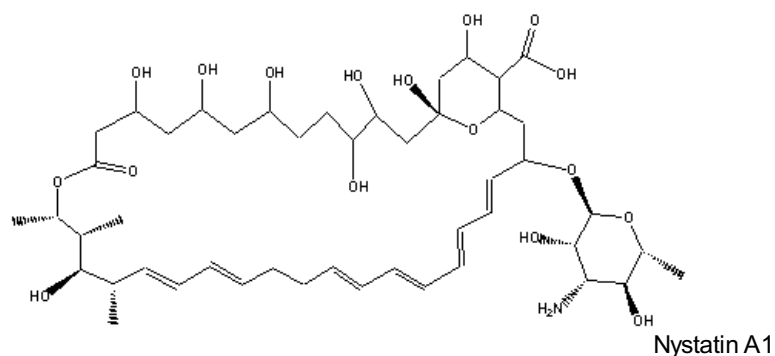


Catalog Number: 100417, 194534

Nystatin

Structure:

Nystatin A



Molecular Formula (for nystatin A): C₄₇H₇₅NO₁₇

Molecular Weight (for nystatin A): 926.11

CAS #: 1400-61-9

Synonym: Mycostatin

Physical Description: Hygroscopic, yellow to light tan powder.

Recommended Storage: +4°C. It is affected by long exposure to light, heat, and air.

Solubility: Very slightly soluble in water (effective as a suspension); slightly to sparingly soluble in alcohol, in methanol, in n-propyl alcohol, and in n-butyl alcohol; insoluble in chloroform, in ether, and in benzene. Stock suspension in water (50 mg/ml) can be aliquoted and frozen at -20°C for up to approximately 3 to 4 months. Suspensions are stable at 37°C for up to 3 days.¹¹

Description: Nystatin is an antifungal antibiotic obtained from *Streptomyces noursei*. It is known to be a mixture, but the composition has not been completely elucidated. Nystatin A is closely related to amphotericin B. Each is a macrocyclic lactone containing a ketal ring, an all-trans polyene system, and a mycosamine (3-amino-3-deoxyrihamnose) moiety.

Nystatin probably acts by binding to sterols in the cell membrane of the fungus with a resultant change in membrane permeability allowing leakage of intracellular components. It is absorbed very sparingly following oral administration. Most of the orally administered nystatin is passed unchanged in the stool.

Recommended Concentration: 50 mg/L for yeasts and fungi.

Availability:

Catalog Number	Description	Size
100417	Nystatin	500 KU 1 MU 5 MU 25 MU
194534	Nystatin, cell culture reagent	500 KU 1 MU

References:

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11. Perlman, D., "Use of Antibiotics in cell culture media." *Methods in Enzymology: Cell Culture*, Jakoby, W.B. and Pastan, I.H. (eds.), Academic Press: New York, p. 112 (1979).