

Nystatin Suspension

With 10,000 units Nystatin per ml in Dulbecco's Phosphate Buffered Saline

Product Code: A012

Product Description :

Molecular Weight: 926.1
Molecular Formula: $C_{47}H_{75}NO_{17}$
CAS number: 1400-61-9

Nystatin is a polyene antifungal agent effective against molds and yeasts, including *Candida*. It was originally extracted from bacteria *Streptomyces noursei* in 1950. Like amphotericin B, nystatin also binds with ergosterol, a major component of fungal cell membrane, forming pores in the membrane. The resultant loss of cations (e.g. K^+ , Na^+ , H^+), and/or other low molecular weight substances including sugars, amino acids or nucleotides, the increase or amplification of Na^2+/K^+ pump activity in addition to the inhibitory effect through these channels in the extracellular space of several membrane bound enzymes collectively lead to fungal death. Ergosterol is unique to fungi, so the drug does not have any adverse effect on animal cells.

A012 is sterile filtered suspension formulated to contain 10,000 units nystatin per ml of Dulbecco's Phosphate buffered saline.

Directions :

Recommended use concentration is 10ml/L. Sensitive cell lines may react differently to this product. Hence it is recommended to determine optimum usage dose empirically for individual cell line.

Quality Control:

Appearance

Yellow suspension.

pH

6.70 -7.30

Osmolality in mOsm/Kg H₂O

270.00 -310.00

Nystasin concentration

10,000 U/ml

Sterility

No bacterial or fungal growth is observed after 14 days of incubation, as per USP specification.

Cultural Response

1. No toxicity to cells.
2. Antibiotic sensitivity test

Endotoxin Content

NMT 0.5EU/ml

Storage and Shelf Life:

Store at $-20^{\circ}C$ away from bright light.

Aqueous suspension should be stored away from bright light as it is light sensitive.

Nystatin is effective as a suspension.

However, it begins to lose activity soon after preparation. Factors such as heat, light and oxygen accelerate the process of decomposition. In tissue culture media, Nystatin is stable for three days at $37^{\circ}C$ or in moderately alkaline media. However, at a pH of less than 2 or greater than 7 this antimycotic is very labile and readily inactivated.

Take the amount needed, aliquot and re-freeze at specified temperature ($-20^{\circ}C$).

Shelf life is 24 months.

Use before expiry date given on the product label.

Disclaimer :

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