

Technical Information

Neomycin Sulphate Solution

With 10 mg/ml Neomycin in 0.9% normal saline

Product Code: A01024

Application:-

Molecular Weight: 908.88

Molecular Formula: $C_{23}H_{46}N_6O_{13} \cdot 3H_2SO_4$

CAS No: 1405-10-3

Neomycin sulfate salt is an aminoglycoside antibiotic obtained from *Streptomyces fradiae*. It is a complex of three separate compounds, neomycin A (neamine; inactive), neomycin C and neomycin B (framycetin). Neomycin binds to 30S subunit of rRNA and interferes with translation process. This leads inhibition of initiation of protein synthesis and ultimately elongation of polypeptide chain. It is a broad spectrum antibiotic active against Gram-positive and Gram-negative organisms. In cell culture, neomycin sulfate is used as an antimicrobial agent to prevent contamination. It is also used as a selection agent for prokaryotic cells that have been transformed using the selectable marker gene (neo).

A01024 is a sterile filtered solution formulated to contain 10mg neomycin per ml.

Methodology

Recommended use concentration is 5ml/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

Colourless, clear solution.

pH

5.50 – 6.50

Osmolality in mOsm/Kg H₂O

260.00 – 300.00

Sterility

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

Gentamicin Concentration

10 mg/ml

Cultural Response

1. No toxicity to cells.
2. Antibiotic Susceptibility Test

Endotoxin Content

NMT 0.5EU/ml

Storage and Shelf Life

Store at 2-8°C.

Solution is stable for 5 days at 37°C.

Shelf life of the product is 24 months.

Use before expiry date given on the product label.

Disclaimer :

- User must ensure suitability of the product(s) in their application prior to use.
- The product conforms solely to the technical information provided in this booklet and to the best of knowledge research and development work carried at **CDH** is true and accurate.
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