

Technical Information

Kanamycin Solution

With 50mg/ml Kanamycin in 0.9% normal saline

Product Code: A01009

Application:-

Molecular Weight: 582.58

Molecular Formula: $C_{18}H_{36}N_4O_{11}.H_2O_4S$

CAS No: 25389-94-0

Synonym: Kanamycin sulfate salt, Kanamycin A

Kanamycin sulfate is a water soluble broad spectrum antibiotic obtained from soil bacterium *Streptomyces kanamyceticus*. It is an aminoglycoside antibiotic effective against Gram-negative and Grampositive bacteria and mycoplasma. It binds to the 70S ribosomal subunit, inhibits translocation, and elicits miscoding. Cross-resistance occurs between kanamycin and neomycin, framycetin, and paromomycin, and partial cross-resistance has been reported between kanamycin and streptomycin. Aminoglycoside-modifying enzymes (acetyltransferase, phosphotransferase, nucleotidyltransferase) alter the antibiotic, preventing its interaction with ribosomes.

A01009 is sterile filtered solution formulated to contain 10mg/ml Kanamycin

Methodology

Recommended use concentration is 2ml/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

Colorless clear solution.

pH

6.00 - 8.00

Osmolality in mOsm/Kg H₂O

350.00 -450.00

Sterility

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

Kanamycin Concentration

50 - 60mg/ml

Cultural Response

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

Endotoxin Content

NMT 0.5EU/ml

Storage and Shelf Life

Store at 2 - 8°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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