

# Spectinomycin dihydrochloride pentahydrate

Cell Culture Tested

**Product Code: TC034**

## Product Description:

Molecular Weight: 495.5

Molecular Formula:  $C_{14}H_{24}N_2O_7 \cdot 2HCl \cdot 5H_2O$

CAS Number: 22189-32-8

Synonym: Togamycin dihydrochloride pentahydrate;  
Actinospectacin dihydrochloride pentahydrate

Spectinomycin dihydrochloride pentahydrate is an aminocyclitol antibiotic which is closely related to the aminoglycosides, produced by a species of soil microorganism *Streptomyces spectabilis*. It has a broad spectrum of activity against many Gram-positive and Gram-negative bacteria.

It exerts bactericidal effect by binding to 30S ribosomal subunit and interfering with the translocation of peptidyl tRNA, thus inhibiting protein synthesis.

In cell culture, it is used as an anti-bacterial agent to prevent contamination.

## Directions:

### Preparation instructions:

For cell culture applications, Spectinomycin dihydrochloride pentahydrate solutions can be prepared as per required concentrations in water. Solutions can be sterilized by filtering through a sterile membrane filter with a porosity of 0.22 microns or less.

## Quality Control:

### Appearance

White to pale buff crystals or powder.

### Solubility

100 mg soluble in 1 ml of water.

### pH (1% in water at 25°C)

3.80 - 5.60

### Water (K.F)

16.00 - 20.00%

### Potency

NLT 603 µg/mg

### Antibiotic sensitivity

Passes

### Cell Culture Test

Passes

## Storage and Shelf Life:

Store powder at 2 - 8°C in air tight containers and away from bright light.

Shelf life is 36 months.

Use before expiry date given on the product label.

## Disclaimer :

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