

# Polymyxin B Solution

With 50mg/ml Polymyxin B in sterile tissue culture grade water

Suitable for Vaccine Production

**Product Code: A027**

## Product Description :

Molecular Weight: 1385.61

Molecular Formula:  $C_{55}H_{96}N_{16}O_{13} \cdot 2H_2SO_4$

CAS No: 1405-20-5

Polymyxin B sulfate, a polypeptide antibiotic, is the sulfate salt of polymyxin B1 and B2 produced by the growth of *Bacillus polymyxa*. They are basic polypeptides of about eight amino acids and have cationic detergent action on the cell membrane. Polymyxin B sulfate has bactericidal action against Gram- negative bacteria. It alters the cytoplasmic permeability by binding to negatively charged site in the lipopolysaccharide layer which has electrostatic attraction for the positively charged amino groups in the cyclic peptide portion.

International unit of polymyxin B is defined as the activity contained in 0.000119mg of the second International Standard (1969) of polymyxin B sulfate which contains 8403 units per mg. In cell culture, polymyxin B sulfate is used as an anti-bacterial agent to prevent contamination.

A027 is sterile filtered solution formulated to contain 50mg/ml Polymyxin B sulfate per ml. It is suitable for use in vaccine production.

## Directions :

Recommended use concentration is 1ml/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

5.60 -6.60

### Osmolality in mOsm/Kg H<sub>2</sub>O

30.00 -70.00

### Sterility

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

### Polymyxin B Concentration

50 mg/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 18 months.

Use before expiry date given on the product label.

## Disclaimer :

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