

## Penicillin-Streptomycin Solution, 100 ×

**Cat. No. :** PB180120

**Size:** 125mL

### General Information

|                               |   |
|-------------------------------|---|
| <b>Product Form</b>           | Liquid  |
| <b>Concentration</b>          | 100×  |
| <b>pH</b>                     | 6.0-6.4   |
| <b>Dissolvent</b>             | 10 mM PBS (PH 6.2)                              |
| <b>Antimicrobial spectrum</b> | Gram-positive bacteria & Gram-Negative bacteria |
| <b>Penicillin G</b>           | 10 kU/mL  |
| <b>Streptomycin sulfate</b>   | 10 mg/mL  |
| <b>Storage</b>                | -5~-20℃, Shading Light                          |
| <b>Shipping</b>               | Ice bag   |
| <b>Expiration date</b>        | 12 months                                       |

### Background

Penicillin-streptomycin solution mixture is the most commonly used antibiotic to prevent microbial contamination in vitro. Penicillin can interfere with the synthesis of bacterial cell wall, especially for Gram-positive bacteria. Streptomycin could bind to ribosomal ribosome for 30S and inhibit the synthesis of bacterial protein. It was effective for Gram-Negative bacteria and Gram-positive bacteria, but especially for Gram-Negative bacteria. The combined use of penicillin and streptomycin can prevent most bacterial contamination, but penicillin solution is sensitive to temperature and pH, easy to degrade at room temperature, and needs cryopreservation, the stability of penicillin solution is the most stable when pH is 6.0 - 6.5. Streptomycin was relatively stable, and pH 5.0-7.5 was the most stable.

### Notes

1. This product is for research use only.
2. This product is sterilized by 0.1 μm filtration.
3. It is necessary to pay attention to the aseptic operation and avoid the pollution.
4. It is not recommended to store this product at room temperature for a long time.
5. Thaw in temperature or 37 °C and mix fully before use. Avoid repeated freezing and thawing. It is recommended to aliquot the solution and store at -5~-20 °C.
6. This product is a concentrated solution and dilute it to the desired concentration before use.