

**Penicillin-Streptomycin-Neomycin Solution (PSN), 100 ×****Cat. No. : PB180123****Size : 100mL****General Information**

<b>Product Form</b>	Liquid
<b>Concentration</b>	100 ×
<b>pH</b>	6.1-6.4
<b>Neomycin sulfate</b>	10 mg/mL
<b>Dissolvent</b>	10 mM PBS (pH6.2)
<b>Antimicrobial spectrum</b>	Gram-positive bacteria & Gram-negative bacteria
<b>Penicillin G</b>	5 kU/mL
<b>Streptomycin sulfate</b>	5 mg/mL
<b>Storage</b>	-5~-20°C, 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. Neomycin can bind to the 30S and 50S subunits of the bacterial ribosome to cause protein miscoding, and is effective against both Gram-negative and Gram-positive bacteria. 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, while neomycin sulfate is more 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 suitable for long time storage at room temperature or 2-8°C.
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.