Penicillin-Streptomycin-Glutamine Solution, 100 ×

Cat. No.: PB180122

Size: 100mL

General Information

Product Form	Liquid
Concentration	100 ×
pH	6.1-6.4
L-Glutamine	200 mM
Dissolvent	10 mM PBS (pH6.2)
Antimicrobial spectrum	Gram-positive bacteria & Gram-negative bacteria
Penicillin G	10 kU/mL
Streptomycin sulfate	10 mg/mL
Storage	-5~-20°C, shading light
Shipping	Ice bag
Expiration date	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 Grampositive 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 Gramnegative 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.

L-glutamine is an essential element in cell culture that is not only an energy source of the cells, but also an important substance involved in protein synthesis and nucleic acid metabolism. The deficiency of L-glutamine will lead to poor cell growth and even death. L- glutamine is unstable in solution and easy to degrade spontaneously, so it is necessary to supplement a certain amount of L-glutamine in culture medium to meet the needs of cell growth after a period of time or when cells grow badly.

Notes

1. This product is only used for scientific research or further research, not for diagnosis and treatment.
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 2-8°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.