10 mg/mL Ampicillin Sodium Solution

Cat. No.: PB180129

Size: 10mL

Background

Ampicillin is a kind of β-lactam antibiotic that belongs to the penicillin family.
Ampicillin is sensitive to beta-lactamase, which breaks down the beta-lactam ring of ampicillin. Ampicillin has abroad-spectrum antibacterial effect, which can inhibit the growth of Gram-positive bacteria, Gram-negative bacteria and anaerobic bacteria. Its antibacterial mechanism is through the combination of penicillin binding protein (PBP), thus blocking the early stages of bacterial cell wall synthesis.Peptidoglycan is a key component for maintaining the integrity of bacterial cell walls. The obstruction of its synthesis will lead to cell wall defects, and the bacteria will rupture and die due to the imbalance of osmotic pressure.
In cell culture, ampicillin can be used to inhibit bacterial contamination; In molecular biology experiments,ampicillin can be used as a screening reagent to selectively screen bacterial clones that have been successfully transformed into ampicillin-resistant genes.

General Information

Form	Liquid
Concentration	10 mg/mL
Recommend working concentration	30-100 μg/mL
Size	10mL
pH	7.0-7.6
Solvent	0.9% normal saline
Storage Conditions	-5~-20°C. Protect from light
Transport Conditions	Ice bag
Expiration Date	12 months

Notes

1. This product is only used for scientific research or further research, not for diagnosis and treatment.
2. This product has been sterilized by 0. 1 μm filter, and it can be used directly after melting.
3. When using this product, pay attention to your operation to prevent bacterial contamination.
4. The product should be thawed at 2-8°C, shaken well and then used, avoiding repeated freezing and thawing. If there are precipitates after thawing, shake them slightly (do not shake violently) and stand at room temperature for about 1 hour or 37°C incubator for 20-30 minutes to observe whether the precipitates can be dissolved normally, and if they can be dissolved, they can be used normally.
5. This product is a concentrated solution, please use it after dilution as needed. It can be used after dilution with complete medium 1:200, and the dilution ratio can also be adjusted within the working concentration range as needed.
6. It is recommended to use the regular at 2-8°C for preservation within one week. It needs to be frozen at -5~-20°C when not in use for a long time, and it is not suitable to keep the storage at room temperature or 2-8°C for a long time. To avoid repeated freezing and thawing, it is recommended to store it in small quantities after subpackaging.