

## Neomycin sulfate (10 mM)

Cat. No.: PB180136

Size: 1mL

### Product Description

Neomycin sulfate is an aminoglycoside antibiotic produced by *Streptomyces* sp. Neomycin can bind to the 30S and 50S subunits of bacterial ribosomes, leading to protein coding errors, and it inhibits the initiation and elongation of peptide chains during protein synthesis. Neomycin is effective against both Gram-negative and Gram-positive bacteria, especially against *Staphylococcus aureus* (*S. aureus*), *Bacillus diphtheriae* and *Bacillus anthracis*.

In cell culture, neomycin is commonly used to prevent bacterial contamination and is not effective against fungi.

Neomycin can also be used as a selective antibiotic to identify prokaryotic cells transformed with the neo gene or the NPT II resistance gene. It can also be used to study the ototoxic side effects of antibiotics and the platelet-derived growth factor response in certain fibroblasts. In addition, neomycin is also a calcium channel protein inhibitor and DNase I inhibitor.

### General Information

Form	Liquid
Concentration	10 mM
Recommend Working Concentration	30-100 $\mu$ M
Size	1mL
Solvent	Ultrapure Water
Storage Conditions	-5~-20°C. Protect from light
Transport Conditions	Ice bag
Expiration Date	12 months

### Notes

1. This product has been filtered and sterilized by 0.1  $\mu$ m filter, can be used directly after melting.
2. When using this product, attention should be paid to aseptic operation to avoid contamination.
3. The product should be placed in 2-8°C thawed, shake well after use, repeated freezing and thawing is not recommended.
4. If there are precipitates after thawing, they can be vortexed and mixed evenly or blown with a pipette. After standing at room temperature for about 1 hour or at 37°C in an incubator for 20-30 minutes, observe whether the precipitates can be dissolved normally, and if they can be dissolved, it can be used normally.
5. This product is a concentrated liquid, please dilute it as needed.
6. It is recommended to use the regular at 2-8°C for preservation within one month. It needs to be frozen at -5~-20°C when not in use for a long time, and it is not suitable for long-term storage at room temperature or 2-8°C. To avoid repeated freezing and thawing, it is recommended to store it in small quantities after subpackaging.
7. This product is only for scientific research or further research use, not for diagnosis and treatment.