

Gentamycin Sulfate

Cat: G8170

Specification: 500mg /1g /10g

Storage: Store at 2-8°C, and it is valid for 3 years.

Product Information

CAS: 1405-41-0

English name: Gentamycin Sulfate

Alias: Doxycycline sulfate

Molecular Formula: C₂₁H₄₃N₅O₇·H₂SO₄

Molecular Weight: 575.67

Appearance (Character): White to off-white powder

Enzyme activity/potency: ≥590IU/mg

pH (4%, water) 25°C: 3.5-5.5

Grade: Tissue Culture Grade

Solubility: 100 mg/mL Water, 50mg/ml as the mother liquor, which needs to be stored at -20°C

Danger Code: R: 36/37/38-42/43-60/61 S: 36/37/39

Introduction

Gentamicin sulfate salt is a broad-spectrum aminoglycoside antibiotic with good antibacterial activity against a large number of gram-negative bacteria and gram-positive bacteria, including even some β-lactam-sensitive vancomycin-resistant enterococci (VRE) and some "superbugs" resistant to glycopeptide antibiotics. Its antibacterial mechanism is to cause codon errors by binding to the 30S subunit of bacterial ribosomes, blocking the transport of peptidyl-tRNA from the A site to the P site, and thereby inhibiting bacterial protein synthesis. Gentamicin can also bind to the outer membrane of Pseudomonas cell membranes, displacing the existing cations, destabilizing the membrane, and forming holes on the cell surface, thereby achieving bactericidal effects.

Gentamicin sulfate is widely used in laboratories:

- 1) Microbiological research, often used in drug sensitivity experiments to screen sensitive bacteria;
- 2) In cell culture, the effective concentration for inhibiting bacterial contamination is 0.5-50μg/mL, which is only for reference;
- 3) Molecular biology research is often used to selectively screen positive clones carrying gentamicin resistance genes, with a commonly used concentration of 15μg/ml for reference only.

Note

1. Unless otherwise specified, the biochemical reagents produced by our company are generally

non-sterile packaged. If they are to be used for cell experiments, please conduct pretreatment in advance.

2. Once dissolved, please store the solution in separate containers to avoid product degradation caused by repeated freezing and thawing.
3. The product information is for reference only. If you have any questions, please call 400-968-6088 for consultation.
4. The products are all for scientific research use only. Do not use it for medical, clinical diagnosis or treatment, food and cosmetics, etc. Do not store them in ordinary residential areas.
5. For your safety and health, please wear laboratory clothes, disposable gloves and masks to operate.