

Spectinomycin

Cat: S8040

Specification: 1g

Storage: Store at 2-8°C, and it is valid for 5 years.

Product Information

CAS: 22189-32-8

English name: Spectinomycin

Appearance (Character): White powder

Molecular Formula: C₁₄H₂₄N₂O₇ · 2HCl · 5H₂O

Molecular Weight: 495.35

Potency: ≥603mcg/mg

Solubility: 50mg/ml in water

Product description reference:

This product is an aminocyclitol antibiotic produced by streptomycin, which is formed by the combination of neutral sugars and aminocyclitol glycosidic bonds. It belongs to aminoglycoside antibiotics. For experiments against Gram-negative bacteria, the recommended concentration is 20-30ug/ml. For other bacteria, please refer to the literature.

Unlike streptomycin, it does not misread mRNA, but it can bind to the bacterial 30S ribosome to block protein biosynthesis. In the drug-resistant strain of spectinomycin, a mutation can be seen in the protein known as "S5" in the 30S ribosome.

This product has moderate antibacterial activity against aerobic gram-negative bacteria such as Escherichia coli, Klebsiella spp., Enterobacteriaceae, Proteus mirabilis, Acinetobacter spp., Haemophilus influenzae, Morganella spp., and is particularly effective against Neisseria gonorrhoeae. In Gram-positive bacteria, it is effective against Group A streptococcus and Staphylococcus epidermidis. Among atypical pathogenic bacteria, it is sensitive to ureaplasma urealyticum. t_{1/2}=2.5 hours. It is commonly used to treat urethritis, proctitis, acute gonorrhea, cervicitis, and other non-complicated gonorrhea caused by penicillin-resistant bacteria, as well as patients with penicillin resistance.

It is mainly used for urinary tract infections caused by Neisseria gonorrhoeae, and is suitable for patients who are resistant to penicillin, tetracycline, and other drugs. This product is only for scientific research.

Instructions for use: (for reference only)

After dissolution, filter and sterilize, and it can be stored for several weeks at 4°C and for a longer period of time at -20°C.

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.