

ChemiPURE Kanamycin Sulfate

5 gr, 10 gr, 25 gr

Cat No: KS05, KS10, KS25

Shipping : Ship with blue ice.
Storage : Store between 4–8°C.

General Information

ChemiPURE Kanamycin Sulfate is a broad-spectrum aminoglycoside antibiotic commonly used in molecular biology, microbiology, and cell culture applications. It exerts its antibacterial effect by binding to the 30S ribosomal subunit, leading to inhibition of protein synthesis and causing misreading of mRNA, ultimately resulting in bacterial cell death.

In molecular biology, Kanamycin is widely used as a selective agent for the maintenance of plasmids encoding kanamycin resistance genes in bacterial systems such as *Escherichia coli*. It is also frequently used in transformation and cloning workflows, as well as in recombinant protein expression studies.

ChemiPURE Kanamycin Sulfate is highly water-soluble and can be easily prepared as a sterile stock solution. Stock solutions are typically prepared in ultrapure water, filter-sterilized, and used at a final working concentration of 25–50 µg/mL for bacterial selection, depending on the strain and application.

For optimal stability, stock solutions should be aliquoted and stored at -20°C to avoid repeated freeze-thaw cycles. Kanamycin is relatively stable in aqueous solutions compared to β-lactam antibiotics, but prolonged exposure to light and elevated temperatures should still be avoided.

This product is sold for laboratory research use only.

CAS Number: 25389-94-0

Molecular Weight: 582.58

Molecular Formula: C₁₈H₃₆N₄O₁₁·H₂SO₄

Appearance: White powder