

ChemiPURE Ampicillin Sodium Salt

5 gr, 10 gr, 25 gr

Cat No: ASS05, ASS10, ASS25

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

General Information

ChemiPURE Ampicillin Sodium Salt is a broad-spectrum β -lactam antibiotic widely used in molecular biology, microbiology, and cell culture applications. It is effective against a wide range of Gram-positive and Gram-negative bacteria by inhibiting bacterial cell wall synthesis through binding to penicillin-binding proteins (PBPs), ultimately leading to cell lysis.

In molecular biology workflows, ChemiPURE Ampicillin Sodium Salt is commonly used as a selective agent for maintaining plasmids carrying the ampicillin resistance gene in bacterial cultures, particularly in *Escherichia coli*. It is suitable for routine cloning, transformation, and recombinant protein expression studies.

ChemiPURE Ampicillin Sodium Salt is supplied as a highly pure, water-soluble sodium salt, enabling easy preparation of stock solutions. Ampicillin solutions are typically prepared in sterile water, filter-sterilized, and used at a final working concentration of 50–100 $\mu\text{g/mL}$ depending on the application.

For optimal performance, stock solutions should be aliquoted and stored at -20°C to prevent repeated freeze-thaw cycles. Ampicillin is sensitive to prolonged exposure to high temperatures and may degrade over time in aqueous solutions, especially at neutral or alkaline pH.

This product is sold for laboratory research use only.

CAS Number: 69-52-3

Molecular Weight: 371.39

Molecular Formula: $\text{C}_{16}\text{H}_{18}\text{N}_3\text{NaO}_4\text{S}$

Appearance: White to light yellow powder