Quality Biological

Technical Information

Ampicillin Ready-Made Solution (100 mg/mL)

Catalog Number: 351-344-731
Format: 10 x 1 mL
Storage Conditions: -10 °C to -20 °C
Shipping Condition: dry ice

Description

Quality Biological's Ampicillin Ready-Made Solution (100 mg/mL) is a concentrated stock solution prepared from ampicillin sodium salt and ultra-pure water. The final product is sterile filtered through a 0.22 µm filter. Using Ampicillin Ready-Made Solution eliminates the need to weigh hazardous antibiotic powders or perform manual sterile filtration.

Applications

Ampicillin Ready-Made solution is primarily used as a selective agent in molecular biology, biochemistry, and microbiology applications. Because ampicillin inhibits bacterial cell wall synthesis, it selectively kills non-transformed bacterial cells while allowing transformed cells carrying an ampicillin resistance gene to survive. Ampicillin exhibits efficacy against a diverse range of bacteria, including Gram-positive and Gram-negative strains like E. coli, β-lactam sensitive bacteria, Staphylococcus aureus, and Streptococcus pneumoniae.

Primary Applications:

- Plasmid selection and maintenance
- Recombinant protein expression
- Maintenance of resistance genes

Quality Control

The efficacy of the Ampicillin Ready-Made solution is confirmed by measuring turbidity after incubating wild-type E. coli and ampicillin resistant E. coli strains in LB broth in the presence or absence of ampicillin. Effective Ampicillin Ready-Made solution prevents cell wall synthesis in the wild-type strain, resulting in a clear broth, whereas the ampicillin resistant strain continues to multiply and produces a cloudy broth.

COAs with the QC test results for individual lots of Ampicillin Ready-Made Solution are available on the Quality Biological website.

Directions:

This product can be added to an agar or culture broth that has been autoclaved and cooled to 45-50 °C. Culture plates with ampicillin can be stored at 2-8 °C for up to two (2) months. The recommended working concentration of ampicillin is 20-125 µg/mL.

Related Products

LB Broth (Luria-Bertani)

Catalog #	340-004-721EA	100 mL
	340-004-101	500 mL
	340-004-131	1000 mL

LB Broth (Lennox)

Catalog #	340-016-101	500 mL

Super Broth

Catalog #	340-018-131	1000 mL

Terrific Broth

Catalog #	340-071-101	500 mL
	351-071-131	1000 mL

All products sold by Quality Biological are intended for research or further manufacturing use, not for diagnostic or therapeutic use.

Quality Biological, Inc. 7581 Lindbergh Drive, Gaithersburg, MD 20879
(800) 443-9331 ● (301) 840-9331 ● e-mail: TechnicalService@qualitybiological.com

Copyright 2026 Quality Biological, Inc. All rights reserved. Quality Biological is a trademark of Quality Biological, Inc.
The Quality Biological logo is a trademark of Quality Biological, Inc.