

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.