

Ampicillin (Sodium Salt)

Cat. 6801

For E. coli in molecular genetics studies.

Practical information

Applications	Categories
Selection of transformants	Escherichia coli
Preparation and recovery of competent cells	Escherichia coli

Industry: Ingredients for culture media / Molecular biology

Principles and uses

Ampicillin (Sodium Salt) is used with LB Media for the isolation of bacteria modified with a plasmid that includes an ampicillin resistance gene. Ampicillin inhibits cell-wall synthesis by interfering with peptidoglycan cross-linking.

Formula per vial

Ampicillin (Sodium Salt) (g)	25
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Preparation

Add Ampicillin (Sodium Salt) powder or a sterile Ampicillin (Sodium Salt) solution to LB medium (Cat. 1551, Cat. 1552, Cat. 1266, Cat. 1308, Cat. 1231, Cat. 1083) to get the desired final concentration ($\mu\text{g}/\text{mL}$), autoclaved and cooled to 50 °C. Mix well and distribute into sterile containers.

Instructions for use

The stock solution can be prepared with water, in a concentration of 50 mg/ml and should be stored at -20 °C. The working concentrations are 20 $\mu\text{g}/\text{ml}$ for stringent plasmids and a concentration of 50 $\mu\text{g}/\text{ml}$ for relaxed plasmids.

Quality control

Solubility	Appearance	Color of the dehydrated medium	Color of the prepared medium	Final pH (25°C)
Sin restos	Polvo fino	White or almost white	N/A	8,0-10,0

Physical-chemical characteristics

Description	Specification
Appearance	White or almost white powder
Identification	A,D or B,C,D positive reaction
Specific optical rotation	<0,15
Dimero	<4,5%
Water	<2%
Bacterial endotoxins	<0,15 EU/mg
Sterility	Conforms
Assay (C16H9N3O4S)	91,0%-102,0%
Heavy metals	<20 ppm
Methylene chloride	<0,20%

Storage

Temp. Min.:2 °C
Temp. Max.:8 °C

Bibliography

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