

Luria Agar with Ampicillin 100 µg/ml (Miller's LB Agar)

Cat. 2085

For molecular studies of *E. coli*.

Practical information

Applications	Categories
Selection of transformants	<i>Escherichia coli</i>

Industry: Molecular biology / Microbiological Culture Media

Principles and uses

Luria Agar with Ampicillin 100 µg/ml (Miller's LB Agar) medium is used for the selective growth of ampicillin resistant *E. coli* recombinant strains in molecular genetic studies.

The transformed *E. coli* are plated directly onto selective agar media (LB Agar containing antibiotic), fewer transformed colonies will appear per ml plated. To select the bacteria with the plasmid, it is necessary to subcultivate an inoculum from LB Agar to a LB Broth with the antibiotic added.

Formula in g/L

Ampicillin	0,1	Bacteriological agar	15
Sodium chloride	10	Tryptone	10
Yeast extract	5		

Preparation

Suspend 40 grams of medium in one liter of distilled water. Mix well and dissolve by heating with frequent agitation. Boil for one minute until complete dissolution. DO NOT OVERHEAT. DO NOT AUTOCLAVE. Cool to 45-50 °C, mix well and dispense into plates.

Instructions for use

Inoculate and incubate at a temperature of 35±2 °C for 18-24 hours.

Quality control

Solubility	Appearance	Color of the dehydrated medium	Color of the prepared medium	Final pH (25°C)
w/o rests	Fine powder	Beige	Amber, slightly opalescent	7,0±0,2

Microbiological test

Incubation conditions: (35±2 °C / 18-24 h).

Microorganisms	Specification
<i>Escherichia coli</i> DH5 alpha + pUC19	Good growth
<i>Escherichia coli</i> ATCC 25922	Total inhibition
<i>Escherichia coli</i> ATCC 8739	Total inhibition

Storage

Temp. Min.: 2 °C
Temp. Max.: 8 °C

Bibliography

Atlas, R.M., L.C.Parks (1993) Handbook of Microbiological Media. CRC Press, Inc. London

The condensed protocols from molecular cloning: a laboratory manual/ Joseph Sambrook, David W. Russell.