

Luria Agar with Kanamycin 50 µg/ml (Miller's LB Agar)

Cat. 2091

To select colonies of Escherichia coli in molecular genetics.

Practical information

Applications	Categories
Selection of transformants	Escherichia coli

Industry: Molecular biology / Microbiological Culture Media

Principles and uses

Luria Agar with Kanamycin 50 µg/ml (Miller's LB Agar) is used for the selective growth of Kanamycin resistant E. coli recombinant strains in molecular genetic studies. This medium is recommended for strains that require less salt concentration.

The transformed E. coli are plated directly onto selective agar media (LB Agar containing antibiotic), where 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 LB Broth with the antibiotic added.

Formula in g/L

Bacteriological agar	15	Kanamycin	0,05
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. Sterilize in autoclave at 118 °C for 10 minutes. Cool to 45-50 °C and dispense into plates.

Instructions for use

- Carry out the experimental procedure according to appropriate use or purpose.
- Inoculate and incubate at 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
Escherichia coli DH5 alpha + PH SG 298	Good growth
Escherichia coli ATCC 25922	Total inhibition
Escherichia coli ATCC 8739	Total inhibition

Storage

Temp. Min.: 2 °C

Temp. Max.:25 °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.