

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

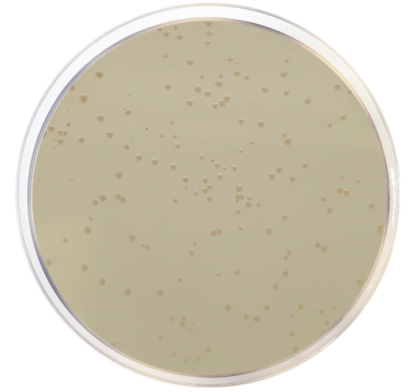
Cat. 2091

To select colonies of *Escherichia coli* in molecular genetics.

Practical information

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

Industry: Culture media for Molecular biology



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		

Typical formula g/L * Adjusted and/or supplemented as required to meet performance criteria.

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

- 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)

Inoculation conditions: Productivity quantitative (100±20. Min.50 cfu) / Selectivity (10⁴-10⁶ cfu)

Reference medium: TSA

Microorganisms	Specification
Escherichia coli DH5 alpha + PH SG 298	Good growth >50%
Escherichia coli ATCC 25922	Total inhibition
Escherichia coli 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.