

Specification

Liquid medium for general purposes and molecular genetic studies of *Escherichia coli*.

Formula * in g/L

Casein peptone..... 10.0
 Yeast extract..... 5.0
 Sodium chloride..... 10.0

Final pH 7,0 ±0,2 at 25 °C

* Adjusted and /or supplemented as required to meet performance criteria

Directions

Dissolve 25 g of powder in 1 L of distilled water. Distribute into suitable containers and sterilize in the autoclave at 121°C for 15 minutes.

Description

LB Media was originally formulated by Luria and Burrous, but Lennox added sodium chloride to improve the osmolarity of the media. The formulation of this broth is according to the Lennox recipe, modified by Miller, who has increased the sodium chloride concentration.

Technique

Dilute and prepare samples and volumes as necessary according to specific protocols, established regulations, official directives and / or expected results. Each technician must evaluate the results according to the specifications established in his laboratory.

Quality control

Incubation temperature: 35 °C ± 2.0 **Incubation time:** 18-24 h

Inoculum: Practical range ≤100 (Productivity)

Microorganism	Growth	Remarks
<i>Escherichia coli</i> ATCC® 8739	Good	-
<i>Escherichia coli</i> ATCC® 35218	Good	-
<i>Escherichia coli</i> ATCC® 25922	Good	-
<i>Escherichia coli</i> ATCC® 11775	Good	-

References

- ATLAS, R.M. & L.C. PARKS (1993) Handbook of Microbiological Media. CRC Press, Inc. London.
- AUSUBEL, F.M., R. BRENT, R.E. KINGSTON, D.D. MOORE, J.G. SEIDMAN, J.A. SMITH & K. STRUHL (1994) Current protocols in molecular biology. Greene Pub. Assoc. Inc. Brooklyn. NY.
- GHERNA, R., P. PIENTA & R. COTE (Eds.) 1992. ATCC Catalogue of Bacteria and Bacteriophages. Media #1065, #1226, #1226, #1235, #1236, #1315, #1364. American Type Culture Collection. Rockville. MD. USA.
- ISO 11133:2014/ Adm 1:2018. Microbiology of food, animal feed and water. Preparation, production, storage and performance testing of culture media.
- LURIA, S.E. & J.W. BURROUS (1955) Hybridization between *Escherichia coli* and *Shigella*. J. Bacteriol. 74:461-476.
- LENNOX, E.S. (1955) Transduction of linked genetic character of the host bacteriophage P1. Virology 1:190-206.
- SAMBROOK, J., E.F. FITSCH & T. MANIATIS (1989) Molecular cloning: A laboratory manual. 2nd ed. Cold Spring Harbor Laboratory. Cold Spring Harbor. NY.
- MILLER, J.H. (1972) Experiments in Molecular Genetics. Cold Spring Harbor Laboratory. Cold Spring Harbor, N.Y.
- MILLER, J.H. (1992) A short course in bacterial genetics: A laboratory manual and handbook for *Escherichia coli* and related bacteria, p. 194-195. Cold Spring Harbor Laboratory Press, Cold Spring Harbor, N.Y.

Storage

For laboratory use only. Keep tightly closed, away from bright light, in a cool dry place (+2 °C to 25 °C).