

LB Agar

Medium for the cultivation of *Escherichia coli* used in molecular genetic studies.

TYPICAL FORMULA	(g/l)
Enzymatic Digest of Casein	10.0
Yeast Extract	5.0
Sodium Chloride	5.0
Agar	15.0
Final pH 7.0 ± 0.2 at 25°C	

DESCRIPTION

LB Agar (Lennox*) is a medium used for maintaining and propagating recombinant strains of *Escherichia coli* in molecular microbiology procedures.

*Three formulations differing in the amount of sodium chloride were developed to provide selection of the optimal salt concentration for a specific strain. Lennox contains half the sodium chloride of the miller formulation and ten times the sodium chloride level of Luria.

PRINCIPLE

Enzymatic digest of casein provides carbon, nitrogen, amino acids and minerals. Yeast extract supplies vitamins and trace elements. Sodium chloride maintains the osmotic balance of the medium. Agar is the solidifying agent.

PREPARATION

Suspend 35.0 g of powder in 1 liter of deionized or distilled water. Bring to boil and shake until completely dissolved. Sterilize at 121°C for 15 minutes. Cool up to 45-50°C. Pour in Petri dishes.

TECHNIQUE

Consult appropriate references for detailed information and recommended procedures.

INTERPRETATION OF RESULTS

Observe colonies on the agar surface.

STORAGE

The powder is very hygroscopic, store the powder at 10-30°C, in a dry environment, in its original container tightly closed and use it before the expiry date on the label or until signs of deterioration or contamination are evident. Store prepared plates at 2-8°C away from light.

WARNING AND PRECAUTIONS

The product does not contain hazardous substances in concentrations exceeding the limits set by current legislation and therefore is not classified as dangerous. It is nevertheless recommended to consult the safety data sheet for its correct use. The product is designed for professional use only and must be used by properly trained operators.

DISPOSAL OF WASTE

Disposal of waste must be carried out according to the national and local regulations in force.

REFERENCES

1. Sambrook, J., E. F. Fritsch, and T. Maniatis (1989) Molecular cloning: a laboratory manual, 2nd ed. Cold Spring Harbor Laboratory, Cold Spring Harbor, New York.
2. Miller, J. H. (1972) Experiments in molecular genetics. Cold Spring Harbor Laboratory. Cold Spring Harbor, New York.
3. Lennox (1955) Transduction of linked genetic characters of the host by bacteriophage P1. *Virology* 1:190-206.
4. Luria S.E. and J.W. Burrous (1955) Hybridization between *Escherichia coli* and *Shigella*. *J. Bacteriol* 74:461-476.



LIOFILCHEM® S.r.l.

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PRODUCT SPECIFICATIONS

NAME

LB Agar

PRESENTATION

Dehydrated medium

STORAGE

10-30°C

PACKAGING

Ref.	Content	Packaging
610245	500 g	500 g of powder in plastic bottle

pH OF THE MEDIUM

7.0 ± 0.2

USE

LB Agar is a medium used for maintaining and propagating recombinant strains of *Escherichia coli* in molecular microbiology procedures

TECHNIQUE

Refer to technical sheet of the product

APPEARANCE OF THE MEDIUM

Powder medium

Appearance: free-flowing, homogeneous

Colour: beige

Ready-to-use medium

Appearance: clear to very slightly opalescent

Colour: very light amber

SHELF LIFE










4 years

QUALITY CONTROL

- Control of general characteristics, label and print
- Microbiological control
Inoculum for productivity: 50-100 CFU
Incubation Conditions: 35 ± 2°C for 18-24 h

Microorganism		Growth
<i>Escherichia coli</i>	ATCC® 25922	Good
<i>Escherichia coli</i>	ATCC® 8739	Good

TABLE OF SYMBOLS

 Batch code	 Do not reuse	 Manufacturer	 Use by	 Fragile, handle with care
 Catalogue number	 Temperature limitation	 Contains sufficient for <n> tests	 Caution, consult instruction for use	



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