



## L.B. MEDIUM (LURIA BERTANI)

Dehydrated medium for maintaining and cultivating of recombinant strains of *Escherichia coli*

### TYPICAL FORMULA (g/L)

Tryptone.....	10.0
Yeast extract .....	5.0
Sodium chloride.....	5.0
Final pH	7.0 ± 0.2

### DESCRIPTION

**L.B.MEDIUM (LURIA BERTANI)** is a dehydrated medium used for maintaining and cultivating of recombinant strains of *Escherichia coli* in molecular biology procedures. These strains are generally derived from *E.coli* K12, which are deficient in B vitamin production. This strain of *E.coli* has been further modification through specific mutation to create an auxotrophic strain that is not capable of growth on nutritionally deficient media.

### PRINCIPLE

**L.B.MEDIUM (LURIA BERTANI)** provides all the nutritional requirements of recombinant strains of *Escherichia coli*. Peptone provides nitrogen and carbon. Vitamins (including B vitamins) and certain trace elements are provided by yeast extract. Sodium ions for transport and osmotic balance are provided by sodium chloride.

### PREPARATION

Suspend 20.0 g of powder in 1 litre of distilled or deionized water. Mix until completely dissolved. Dispense into final containers. Sterilize in autoclave at 121°C for 15 minutes.

### TECHNIQUE

Consult appropriate references for recommended test procedures <sup>1-5</sup>.

### INTERPRETATION OF RESULTS

Growth is evident by the appearance of turbidity.

### 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 media at 2-8°C.

### WARNING and PRECAUTIONS

The product is not classified as hazardous by current legislation and does not contain harmful substances in concentrations of ≥1%. The product must be used only by properly trained operators.

### DISPOSAL of WASTE

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

### REFERENCES

1. Lennox. 1955. *Virology* 1:190.
2. Luria, S.E., and J.W. Burrous. 1995. Hybridization between *Escherichia coli* and *Shigella*. *J. Bacteriol.* **74**: 461-476.
3. Luria, S.E., J.N. Adams, and R.C. Ting. 1960. *Virology.* **12**: 348-390.
4. Miller, J.H. 1972. *Experiments in molecular genetics*. Cold Spring Harbor Laboratory, Cold Spring Harbor, N.Y.
5. Sambrook, Fritsch and Maniatis. 1989. *Molecular cloning: a laboratory manual*, 2<sup>nd</sup> ed. Cold Spring Harbor Laboratory Press, Cold Spring Harbor, N.Y.



### LIOFILCHEM Bacteriology Products

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## PRODUCT SPECIFICATIONS

### NAME

L.B.MEDIUM (LURIA BERTANI)

### PRESENTATION

Dehydrated culture medium

### STORAGE

10-30°C

### PACKAGING

Code	Content	Packaging
610084	500 gr	500 gr of powder in plastic bottle
620084	100 gr	100 gr of powder in plastic bottle

### pH OF THE MEDIUM

7.0 ± 0.2

### USE

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### TECHNIQUE

Refer to technical sheet of the product.

### APPEARANCE of the MEDIUM

#### Dehydrated medium

Appearance: free-flowing, homogeneous.

Colour: off white to beige.

#### Prepared medium

Appearance: clear to very slightly opalescent.

Colour: very light amber.

### SHELF LIFE

4 years

### QUALITY CONTROL

- Control of general characteristics, label and print
- Sterility control  
7 days at 25 ± 1°C, in aerobiosis  
7 days at 36 ± 1°C, in aerobiosis
- Microbiological control  
Inoculum for productivity: 10-100 UFC/ml  
Incubation conditions: 18-24 hours at 36 +/- 1°C, in aerobiosis

Microorganism	ATCC	Growth
<i>Escherichia coli</i>	53868 (DH5)	good
<i>Escherichia coli</i>	JM103	good
<i>Escherichia coli</i>	33694 (HB 101)	good

### TABLE of SYMBOLS

Symbol	Meanings
	Catalogue number
	Manufacturer
	Temperature limitation
	Contains sufficient for <n> tests
	Use by
	Batch code
	Do not reuse
	Consult accompanying documents



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