

LB Agar(Lennox)

Catalog : HB0129-4-250

LB Agar(Lennox) is recommended for the cultivation and maintenance of recombinant strains of *Escherichia coli* for genetic and molecular biology studies.

Approximate Formula:

Ingredients	gm./liter
Pancreatic 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	

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

Directions:

Suspend 35.0g of the medium in one liter of distilled water or deionized water. Mix well and heat with frequent agitation to completely dissolve the powder. Dispense into appropriate flasks or tubes. Sterilize in the autoclave at 121 °C for 15 minutes.

Principle and Interpretation:

LB Agar (Lennox) is a highly-referenced medium developed by Lennox for the growth and maintenance of pure culture of recombinant strains of *E. coli*. It is a nutritionally rich medium that contains all the nutritional requirements for *E.coli* strains. In the formula, Pancreatic digest of casein provides nitrogen, vitamins, minerals and amino acids essential for growth. Yeast extract is source of vitamins, particularly the B group. Sodium chloride supplies essential electrolytes for transport and osmotic balance. Agar is the solidifying agent.

Appearance:

Dehydrated medium is a free-flowing yellowish powder. The prepared medium is a kind of yellowish transparent gel.

Precautions:

This medium is for laboratory use only. Dried medium which is past shelf life, caking or color variation cannot be used.

Storage conditions and Shelf life:

LB Agar(Lennox) must be stored tightly capped in the original container at 5-30°C. The dehydrated medium has a shelf life of 5 years from date of manufacturing. Prepared medium may be stored, out of direct light at 2-8°C.

Quality control:

Prepare the culture medium as per label directions. Inoculate and incubate at 36±1 °C for 18-24 hours.

Microorganism	Strains Number	Inoculum (CFU)	Recovery	Growth	Remarks
<i>Escherichia coli</i>	ATCC 33694	20-200	≥70%	luxuriant	Colorless large colonies
<i>Escherichia coli</i>	ATCC 53868	20-200	≥70%	luxuriant	Colorless large colonies

References:

- Bertani, G. (2004). Lysogeny at mid-twentieth century: P1, P2, and other experimental systems. *J. Bacteriology*. 186:595-600. PMID 14729683 .
- Lennox.(1955). *Virology* 1:190.
- Sambrook, Fritsch and Maniatis.(1989). *Molecular cloning: a laboratory manual*, 2nd ed.Cold Spring Harbor Laboratory Press, Cold Spring Harbor, N.Y.