



LB BROTH (MILLER)

- For in vitro use only -

Catalogue No. BL95

Our LB Broth (Miller) is used in the maintenance and propagation of *Escherichia coli* in molecular microbiology procedures.

LB media formulations have been an industry standard for the cultivation of *Escherichia coli* as far back as the 1950's. LB Broth was first formulated by Giuseppe Bertani and published in 1951. Our current formulation is a modification of the Lennox Broth described in 1955 and is based on the work of Miller. LB Broth has been widely used in molecular microbiology applications for the preparation of plasmid DNA and recombinant proteins. The medium is nutrient-rich and provides all the essential amino acids and vitamins required for quick and sustained bacterial growth.

Formula per Litre of Medium

Tryptone 10.0 g
Yeast Extract 5.0 g
Sodium Chloride 10.0 g

pH 7.0 ± 0.2

Recommended Procedure

1. Allow medium to reach room temperature prior to inoculation.
2. Aseptically inoculate the broth using an inoculum obtained from a pure culture of *Escherichia coli*.
3. Incubate broth aerobically at 35°C for 24 hours.

Interpretation of Results

After the incubation period, growth is characterized as turbidity in the broth.

Quality Control

After checking for correct pH, colour, depth, and sterility, the following organisms are used to determine the growth performance of the completed medium.

Organism	Expected Results
<i>Escherichia coli</i> ATCC 33526	Growth

Storage and Shelf Life

Our LB Broth (Miller) should be stored in the upright position at 4°C to 8°C. Under these conditions this medium has a shelf life of 26 weeks from the date of manufacture.

Ordering Information

Cat#	Description	Format
BL95-200	LB Broth (Miller) 200-mL	12/case
BL95-1L	LB Broth (Miller) 1-L	Each

References

1. Bertani G. Studies on lysogenesis. I. The mode of phage liberation by lysogenic *Escherichia coli*. J Bacteriol 1951; 62:293-300.
2. Luria SE, Burrows JW. Hybridization between *Escherichia coli* and *Shigella*. J Bacteriol 1955; 74:461-76.
3. Lennox ES. Transduction of linked genetic characters of the host by bacteriophage P1. Virology 1955; 1:190.

4. Luria SE, Adams JN, Ting RC. 1960. Transduction of lactose-utilizing ability among strain of *E. coli* and *S. dysenteriae* and the properties of the transducing phage particles. *Virology* 1960; 12:348-390.
5. Miller JH. Experiments in molecular genetics. Cold Spring Harbor, NY, 1972.
6. Sambrook J, Fritsch EF, Maniatis T. Molecular cloning: a laboratory manual, 2nd edition. Cold Spring Harbor, New York: Cold Spring Harbor Laboratory, 1989.

Original: January 2005

Revised / Revisited: October 2014