

Technical Data Sheet

Luria Bertani Broth (Miller)

(MML-LBB-01)

Principle

Luria Bertani broth, Miller, composed of tryptone, yeast extract and sodium chloride. The Tryptone serves the source of nitrogen and amino acids, yeast extract provides nitrogen and vitamins and other growth factors. Sodium chloride maintains the osmotic equilibrium. The Luria Bertani (Miller) is used for the cultivation of *Escherichia coli*.

Use: Recommended for cultivation of recombinant strains of *Escherichia coli*.

Contents*

Ingredients	Gram/Litre
Tryptone	10.000
Yeast Extract	5.000
Sodium Chloride	10.000
pH at 25°C	7.0 ±0.2

* Formula adjusted for optimum performance and parameters

Directions: Dissolve 25.00 grams in 1000 ml distilled water. Boil to dissolve the medium completely and sterilize by autoclaving at 15 lbs pressure (121°C) for 15 min, cool it to 42-45 °C and inoculate test sample aseptically.

Specimens types analyzed

Pharmaceutical samples, clinical and non-clinical samples etc.

Precautions to be taken

These microbial media are intended for the in-vitro use only. All the handling, experiments, storage, and discarding should be performed with the help of skilled and knowledgeable technicians and as per the established guidelines. The material should be disposed only after proper sterilization by autoclaving. Please go through the MSDS of the media to avoid any accidents or in emergency.

Performance and Evaluation

The expected performance of the medium is liable to use as per the direction on the label when stored at optimum conditions and within expiry date.

Quality Control

Appearance	Light beige colored free flowing, homogeneous powder
Reaction of 2.5% solution	7.0 ±0.2 at 25 °C
pH	6.80- 7.20
Color and clarity of ready medium	Light yellow to amber colored opalescent solution
Growth Promotion properties	Best at ≤ 100 CFU at 32-37 °C for 18-72 h
Indicative properties	Optimum at ≤ 100 CFU at 32-37 °C for 18-48 h
Negative control	Performed using sterile distilled water

Different Microbial Response

Organism	ATCC	Inoculum	Growth	Incubation Temperature	Incubation period
<i>Escherichia coli</i>	8739	50-100	Luxurious	33-37 °C	18-48 h

Storage and Shelf Life

Hygroscopic; keep container tightly closed. Store in cool dry place.

Disposal: To avoid the contamination or propagation of any hazardous microbes the used, unusable or modified preparation of this product must be disposed after autoclaving after completion of task.

Reference

1. Atlas, R. M. (2005). *Handbook of media for environmental microbiology*. CRC press.
2. *Difco Manual* (1998). 11th Edition. Difco Laboratories., Division of Becton Dickinson and Company, Sparks, Maryland, USA.
3. Rand, M. C., Arnold E. Greenberg, and Michael J. Taras, (1976), *Standard methods for the examination of water and wastewater*. Prepared and published jointly by American Public Health Association, American Water Works Association, and Water Pollution Control Federation.

Disclaimer

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MICROMEDICA LABORATORIES PRIVATE LIMITED.

2 & 3, 48/C Labh Smruti, Baptista Road, Vile Parle West, Mumbai, Mumbai Suburban, Maharashtra, 400056