

TM 2170 – LURIA BERTANI AGAR, MODIFIED

INTENDED USE

For the cultivation and maintenance of recombinant strains of *Escherichia coli* and may be used for routine cultivation of not particularly fastidious microorganisms.

PRODUCT SUMMARY AND EXPLANATION

Luria Bertani Agar, Modified is prepared as described by Lennox for cultivation and maintenance of recombinant strains of *Escherichia coli*. The medium is nutritionally rich for the growth of pure cultures of recombinant strains. Strains generally derived from *Escherichia coli* K12 are deficient in Vitamin B synthesis which are further modified by specific mutation to create auxotrophic strains and are unable to grow on nutritionally deficient media.

COMPOSITION

Ingredients	Gms / Ltr
Casein enzymic hydrolysate	10.000
Yeast extract	5.000
Sodium chloride	5.000
Agar	10.000

PRINCIPLE

This medium consists of Casein enzymic hydrolysate which provides peptides and peptones while Vitamin B complex is provided by yeast extract. Sodium chloride provides sodium ions for the membrane transport and maintains osmotic equilibrium of the medium.

INSTRUCTION FOR USE

- Dissolve 30.0 grams in 1000 ml purified/distilled water.
- Heat to boiling to dissolve the medium completely.
- Sterilize by autoclaving at 15 psi pressure (121°C) for 15 minutes.
- Dispense as desired.

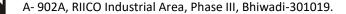
QUALITY CONTROL SPECIFICATIONS

Appearance of Powder	: Cream to yellow homogeneous free flowing powder.			
Appearance of prepared medium	: Yellow to amber coloured, clear to slightly opalescent gel forms in petri plates.			
pH (at 25°C)	: 7.2 ± 0.2			

INTERPRETATION

Cultural characteristics observed after incubation.

Microorganism ATCC Inoculum (CFU/ml) Growth Recovery Incubation Incubation Temperature Period



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PRODUCT DATA SHEET

Escherichia coli	25922	50-100	Luxuriant	>=70%	35-37°C	18-24 Hours
Escherichia coli	23724	50-100	Luxuriant	>=70%	35-37°C	18-24 Hours

PACKAGING:

In pack size of 500 gm bottles.

STORAGE

Dehydrated powder, hygroscopic in nature, store in a dry place, in tightly-sealed containers between 25-30°C and protect from direct sunlight. Under optimal conditions, the medium has a shelf life of 4 years. When the container is opened for the first time, note the time and date on the label space provided on the container. After the desired amount of medium has been taken out replace the cap tightly to protect from hydration.

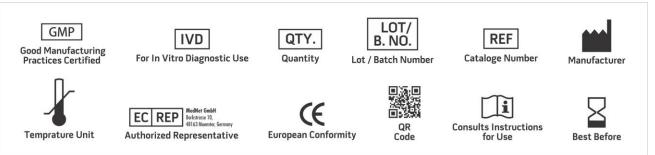
Product Deterioration: Do not use if they show evidence of microbial contamination, discoloration, drying or any other signs of deterioration.

DISPOSAL

After use, prepared plates, specimen/sample containers and other contaminated materials must be sterilized before discarding.

REFERENCES

1. Lennox E.S., 1955, Transduction of Linked Genetic Characters of the host by bacteriophage P1., Virology, 1:190. 2. Atlas R.M., 1993, Handbook of Microbiological Media, Ed. by Parks L., CRC Press, Inc.



NOTE: Please consult the Material Safety Data Sheet for information regarding hazards and safe handling Practices. *For Lab Use Only Revision: 08 Nov., 2019

