

TMV 376 – LURIA BERTANI AGAR, MILLER (MILLER LURIA BERTANI AGAR) (VEG.)

INTENDED USE

For cultivation and maintenance of recombinant strains of Escherichia coli.

PRODUCT SUMMARY AND EXPLANATION

Luria Bertani Agar, Miller (Veg) is prepared by replacing casein enzymic hydrolysate with Veg hydrolysate which is free of BSE/TSE risks. It is the modification of Luria Bertani Agar formulated by Lennox for cultivation and maintenance of recombinant strains of *Escherichia coli*. Luria Bertani Agar (Veg), like the conventional media are slightly different with double amount of sodium chloride. The medium is nutritionally rich for the growth of pure cultures of recombinant strains. Strains which are 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
Veg hydrolysate	10.000
Yeast extract	5.000
Sodium chloride	10.000
Agar	15.000

PRINCIPLE

This medium consists of Veg hydrolysate which provides nitrogen and carbon 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 40.0 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.
- Mix well and pour into sterile Petri plates.

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) : 7.5 ± 0.2

INTERPRETATION

Cultural characteristics observed after incubation.

Microorganism	Strains	Inoculum (CFU/ml)	Growth	Recovery	Incubation Temperature	Incubation Period
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Escherichia coli	25922 ATCC	50-100	Luxuriant	>=70%	35-37°C	18-24 Hours
Escherichia coli	23724 ATCC	50-100	Luxuriant	>=70%	35-37°C	18-24 Hours
Escherichia coli DH5 alpha	1652 MTCC	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.

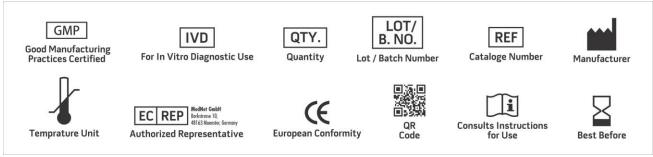
Product Deterioration: Do not use if they show evidence of microbial contamination, discoloration, drying or any other signs of deterioration.

DISPOSAL

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

REFERENCES

- 1. Lennox, E.S. 1955. Virology, 1.
- 2. Atlas, R. M. 2004. A Handbook of Microbiological Media. 3 ed.: CRC Press.



NOTE: Please consult the Material Safety Data Sheet for information regarding hazards and safe handling Practices.

*For Lab Use Only
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