

CM 21011 – LURIA BERTANI AGAR, MILLER (MILLER LURIA BERTANI AGAR)

INTENDED USE

For cultivation and maintenance of recombinant strains of Escherichia coli.

PRODUCT SUMMARY AND EXPLANATION

LuriaBertani Agar is prepared as described by Lennox for cultivation and maintenance of recombinant strains of Escherichia coli. Luria Bertani Agar, Miller is slightly different with double amount of sodium chloride. The media is nutritionally rich for the growth of pure cultures of recombinant strains. Strains derived from Escherichia coli K12 are deficient in Vitamin B synthesis are further modified by specific mutation to create auxotrophic strains and are therefore unable to grow on nutritionally deficient media.

COMPOSITION

Ingredients	Gms / Ltr
Tryptone	10.000
Yeast extract	5.000
Sodium chloride	10.000
Agar	15.000

PRINCIPLE

Tryptone provides peptides and peptones while Vitamin B complex is provided by yeast extract. Sodium chloride provides sodium ions for membrane transport and also maintains the osmotic equilibrium of the medium.

INSTRUCTION FOR USE

- Dissolve 40 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. 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
Escherichia coli	23724	50-100	Luxuriant	≥70%	35-37°C	18-24 Hours



Escherichia coli	25922	50-100	Luxuriant	>=70%	35-37°C	18-24 Hours
Escherichia coli DH5 alpha	1652	50-100	Luxuriant	>=70%	35-37°C	18-24 Hours

PACKAGING:

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

 Good Manufacturing Practices Certified	 For In Vitro Diagnostic Use	 Quantity	 Lot / Batch Number	 Catalogue Number	 Manufacturer
 Temperature Unit	 Authorized Representative MedNet GmbH Birkstrasse 10, 48153 Münster, Germany	 European Conformity	 QR Code	 Consults Instructions for Use	 Best Before

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

*For Lab Use Only

