



Product Data Sheet

LURIA AGAR

Product No. GB-DCM-00347-1A

INTENDED USE

For general cultivation of fastidious and non-fastidious microorganisms.

PRODUCT SUMMARY

Luria Agar is prepared as described by Lennox for cultivation and maintenance of recombinant strains of Escherichia coli. The media is generally used for molecular and genetic studies, because of its nutritive capacity and simple composition, which can be easily altered as per specific requirements. 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 and are further modified by specific mutation to create auxotrophic strains that are unable to grow on nutritionally deficient media.

Product Specifications

| 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 the membrane transport and maintains osmotic equilibrium of the medium.

INSTRUCTION FOR USE

- Dissolve 35.0 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.
- Cool to 45-50°C. Mix well and pour into sterile Petri plates.

QUALITY CONTROL SPECIFICATIONS

Appearance of Powder Cream to yellow homogeneous free flowing powder.

Appearance of prepared : Yellow to amber coloured clear to slightly opalescent gel forms in petri plates.

pH (at 25°C) : 7.0± 0.2



| Microorganism | ATCC | Inoculum (CFU/ml) | Growth | Recovery | Incubation Temperature | Incubation Period |
|------------------|-------|-------------------|-----------|-------------|------------------------|-------------------|
| Escherichia coli | 23724 | 50-100 | Luxuriant | $\geq 70\%$ | 35-37°C | 18-24 Hours |
| Escherichia coli | 25922 | 10-100 | luxuriant | $\geq 70\%$ | 35-37°C | 18-24 Hours |

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.

This product is for research use only.