CM 21008 – LURIA AGAR

INTENDED USE

Forgeneralcultivation of fastidious and non-fastidious microorganisms.

PRODUCT SUMMARY AND EXPLANATION

Luria Agar is prepared as described byLennox 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.

COMPOSITION

Ingredients	Gms / Ltr
Tryptone	10.000
Yeast Extract	5.000
Sodium Chloride	5.000
Agar	15.000

PRINCIPLE

Tryptoneprovides 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 35.0gramsin 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 medium	: Yellowtoambercoloured,cleartoslightlyopalescent gel forms in Petri plates
pH (at 25°C)	: 7.0 ±0.2

INTERPRETATION

Culturalcharacteristics observed afterincubation.

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

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:

Inpacksizeof500 gm bottles.

STORAGE

Dehydrated powder, hygroscopic in nature, store in a dry place, in tightly-sealed containers between 10-25°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.

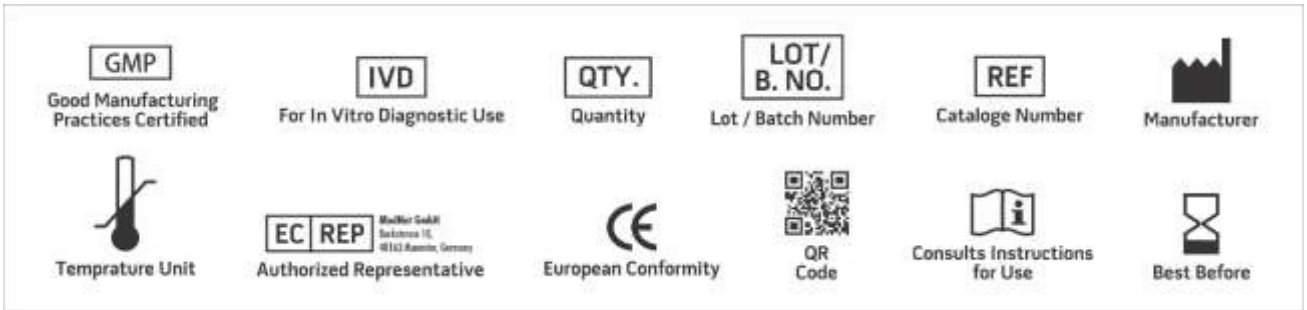
Product Deterioration: Do not use if they show evidence of microbial contamination, discoloration, drying or any other signs of deterioration.

DISPOSAL

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

REFERENCES

1.LennoxE.S.,1955, Transduction of Linked Genetic Characters of the host by bacteriophage P1., Virology, 1:190



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

*For Lab Use Only