

## Luria HiCynth™ Agar

MCD557

Luria HiCynth™ Agar is used for the cultivation and estimation of not particularly fastidious microorganisms.

### Composition\*\*

Ingredients	Gms / Litre
HiCynth™ Peptone No.2*	10.000
HiCynth™ Peptone No.5*	5.000
Sodium chloride	5.000
Agar	15.000
Final pH ( at 25°C)	7.0±0.2

\*\*Formula adjusted, standardized to suit performance parameters

\*Chemically defined peptones

### Directions

Suspend 35.0 grams in 1000 ml distilled water. Heat to boiling to dissolve the medium completely. Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes. Cool to 45-50°C. Mix well and pour into sterile Petri plates.

### Principle And Interpretation

Luria Agar is prepared as described by Lennox (1) for cultivation and maintenance of recombinant strains of *Escherichia coli*. Luria HiCynth™ Agar is a modification of Luria Agar wherein animal or vegetable peptones are replaced by chemically defined peptones to avoid BSE/TSE risks associated with animal peptones. 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.

HiCynth™ Peptone No.2 and HiCynth™ Peptone No.5 provides nitrogenous and carbanaceous compounds, long chain amino acids, vitamins and other growth nutrients required for the growth. Sodium chloride provides sodium ions for the membrane transport and maintains osmotic equilibrium of the medium.

### Quality Control

#### Appearance

Cream to yellow homogeneous free flowing powder

#### Gelling

Firm, comparable with 1.5% Agar gel

#### Colour and Clarity of prepared medium

Yellow to amber coloured clear to slightly opalescent gel forms in Petri plates

#### Reaction

Reaction of 3.5% w/v aqueous solution at 25°C. pH : 7.0±0.2

#### pH

6.80-7.20

#### Cultural Response

Cultural characteristics observed after an incubation at 35-37°C for 18-24 hours.

#### Cultural Response

Organism	Inoculum (CFU)	Growth	Recovery
<b>Cultural Response</b>			
<i>Escherichia coli</i> ATCC 23724	50-100	luxuriant	≥70%
<i>Escherichia coli</i> ATCC 25922	50-100	luxuriant	≥70%

*Escherichia coli* DH5 alpha 50-100 luxuriant  $\geq 70\%$   
MTCC 1652

### Storage and Shelf Life

Store below 30°C in tightly closed container and prepared medium at 2-8°C. Use before expiry period on the label.

### Reference

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

Revision : 00 / 2015

### Disclaimer :

User must ensure suitability of the product(s) in their application prior to use. Products conform solely to the information contained in this and other related HiMedia™ publications. The information contained in this publication is based on our research and development work and is to the best of our knowledge true and accurate. HiMedia™ Laboratories Pvt Ltd reserves the right to make changes to specifications and information related to the products at any time. Products are not intended for human or animal or therapeutic use but for laboratory, diagnostic, research or further manufacturing use only, unless otherwise specified. Statements contained herein should not be considered as a warranty of any kind, expressed or implied, and no liability is accepted for infringement of any patents.