MOLECULAR BIOLOGY
Molecular Biology Growth Media

Technical Information

Super Growth Top Agar

Product Code: G1003

Super Growth Top Agar is an extremely rich medium for obtaining high yields of lambda bacteriophage in liquid lysates.

Composition**

Ingredients	Grams/Litre
Tryptone	35.00
Yeast extract	20.00
Sodium chloride	5.00
Agar	7.00

** Formula adjusted, standardized to suit performance parameters

Methodology

Suspend 67 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. Mix well and dispense as desired.

Principle and Interpretation

Super Growth Top Agar is an extremely rich medium for obtaining high yields of lambda bacteriophage. This media contains tryptone, yeast extract and sodium chloride. Tryptone and yeast extract provide nitrogenous compounds, vitamin B complex and other essential growth nutrients. Sodium chloride maintains osmotic equilibrium. This media was developed by Botstein, D. et al. (1) which contains 3.5 times more tryptone and 4 times more yeast extract. Therefore, Super Growth Top Agar is very rich in tryptone and yeast extract. Top agar is used to distribute bacteriophage and bacterial cells uniformly on the thin layer over the surface of a plate. Top agar contains less amount of agar than usual plates and so stays in a molten state for several days when it is kept at 45° to 50°C.

Quality control

Appearance of Powder :
Cream to yellow coloured, homogeneous, free flowing powder
Gelling :
Firm, comparable with 0.7% Agar gel.
Colour and Clarity :
Light yellow coloured, clear to slightly opalescent gel forms in Petri plates.
Cultural Response :
Cultural characteristics observed after an incubation at 35-37°C for 18 - 48 hours.

Organisms (ATCC)	Growth
Escherichia coli ATCC 23724	good-luxuriant
Escherichia coli ATCC 25922	good-luxuriant
Escherichia coli MTCC1652	good-luxuriant

Storage and Shelf Life

Store below 30°C and the prepared medium at 2 - 8°C. Use before expiry date on the label.

References :

1. Botstein, D. et al, Mol. Biol., 91, 439, (1975)

Disclaimer :

- User must ensure suitability of the product(s) in their application prior to use.
- The product conforms solely to the technical information provided in this booklet and to the best of knowledge research and development work carried at **CDH** is true and accurate.
- **Central Drug House 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 diagnostic or therapeutic use but for laboratory, research or further manufacturing of diagnostic reagents extra.
- 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.
- Do not use the products if it fails to meet specifications for identity and performance parameters.