



Glucose Agar, Modified

M1679

Glucose Agar, Modified is the medium for maintenance of stock cultures of a variety of microorganisms.

Composition**

Ingredients	Gms / Litre
Peptone special	5.000
Glucose	10.000
Agar	20.000
Final pH (at 25°C)	6.5±0.2

**Formula adjusted, standardized to suit performance parameters

Directions

Suspend 35.0 grams in 1000 ml distilled water. Heat to boiling to dissolve the medium completely. Distribute into tubes or flasks. Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes. Pour into sterile Petri plates or distribute into tubes as desired.

Principle And Interpretation

Glucose Agar, Modified is a simple medium supporting growth of wide variety of organisms. It can be used for maintenance of stock cultures of microorganisms (1). It has been demonstrated as a universal medium used for germination of spores of fungus - *Colletotrichum lindemuthianum* (2). It has also been used to study growth profile of *Histoplasma capsulatum* and *Candida albicans* along with Sabouraud dextrose agar to study effect of pH and concentration of glucose (3).

It has glucose as immediate source of carbon. Special peptone provides necessary nitrogenous sources for growth of organisms. Agar acts as a solidifying agent.

Quality Control

Appearance

Cream to yellow coloured homogeneous free flowing powder

Gelling

Firm, comparable with 2.0% Agar gel

Colour and Clarity of prepared medium

Light amber coloured, clear to slightly opalescent gel forms in Petri plates / tubes

Reaction

Reaction of 3.5% w/v aqueous solution at 25°C. pH : 6.5±0.2

pH

6.30-6.70

Cultural Response

M1679: Cultural characteristics observed after an incubation at 35-37°C for 18-24 hours.

Organism	Inoculum (CFU)	Growth	Recovery
Cultural Response			
<i>Escherichia coli</i> ATCC 25922	50-100	good-luxuriant	≥70%
<i>Enterobacter aerogenes</i> ATCC 13048	50-100	good-luxuriant	≥70%
<i>Pseudomonas aeruginosa</i> ATCC 25923	50-100	good-luxuriant	≥70%
<i>Candida albicans</i> ATCC 10231	50-100	luxuriant	≥70 %
<i>Histoplasma capsulatum</i> ATCC 10230	50-100	luxuriant	≥70 %

Storage and Shelf Life

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

Reference

1. Atlas, R.M. 1997. Handbook of microbiological media, 2nd edition, CRC Press Inc. USA.
2. E. Drijfhout and J. Jansen 1989. European Journal of Plant Pathology. Vol.95, No 2. p.119
3. Mathur, R.S., Barnett, H.L. & Lilly, V.G., 1950. Phytopathology Vol. 40: 104.
4. Bartlett, G.W. et al., 1968, Journal of Bacteriology Vol 95.No.6 p. 2171.

Revision : 2 / 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.