

Cooked M Medium w/ Glucose, Hemin and Vitamin K

M1040

Intended Use:

Recommended for cultivation of aerobes and anaerobes, especially pathogenic *Clostridia* and also for the maintenance of stock cultures.

Composition**

Ingredients	g / L
HM granules B #	98.000
Peptone#	20.000
Sodium chloride	5.000
Dextrose(Glucose)	5.000
Yeast extract	5.000
Hemin	0.005
Vitamin K	0.001
Final pH (at 25°C)	7.2±0.2

**Formula adjusted, standardized to suit performance parameters

- Equivalent to Beef heart, granules

Directions

Suspend 13.3 grams in 100 ml purified / distilled water. Mix thoroughly and allow to stand for 15 minutes until all the particles are thoroughly wetted. Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes.

Principle And Interpretation

Cooked Meat Medium with Glucose, Hemin and Vitamin K is a modification of the Cooked Meat Medium originally developed by Robertson (1) for cultivation of anaerobes isolated from wounds. Moore et al (2) have recommended this modified medium for subculturing of anaerobic isolates to be examined by gas liquid chromatography.

The medium contains HM granules B, which provides amino acids and nutrients. It also contains glutathione, a reducing substance which permits the growth of obligate anaerobes. The sulphydryl groups which impart reducing effect are more available in denatured protein and hence the cooked meat is added in the medium. The added supplements glucose, yeast extract, hemin and vitamin K act as growth enhancers for anaerobic microorganisms.

The growth in this medium is indicated by the turbidity or bubble formation by some organisms. Blackening and disintegration of the peptone indicate proteolysis. For best results, medium should be used on the day it is prepared, otherwise it should be boiled or steamed for a few minutes and allowed to cool without agitation and then inoculated.

Type of specimen

Clinical samples- Wound, faeces, etc.

Specimen Collection and Handling:

For clinical samples follow appropriate techniques for handling specimens as per established guidelines (3,4). After use, contaminated materials must be sterilized by autoclaving before discarding.

Warning and Precautions :

In Vitro diagnostic Use only. For professional use only. Read the label before opening the container. Wear protective gloves/protective clothing/eye protection/ face protection. Follow good microbiological lab practices while handling specimens and culture. Standard precautions as per established guidelines should be followed while handling clinical specimens. Safety guidelines may be referred in individual safety data sheets.

Limitations :

1. Only freshly prepared medium should be used for better results.

Performance and Evaluation

Performance of the medium is expected when used as per the direction on the label within the expiry period when stored at recommended temperature.

Quality Control

Appearance

Brown coloured granules

Colour and Clarity of prepared medium

Medium amber coloured clear to slightly opalescent supernatant over insoluble granules.

Reaction

Reaction of 13.3% w/v aqueous solution at 25°C. pH : 7.2±0.2

pН

7.00-7.40

Cultural Response

Cultural characteristics observed after an incubation at 35-37°C for 40-48 hours.

Organism	Inoculum (CFU)	Growth
Clostridium butyricum	50-100	luxuriant
ATCC 13732		
Clostridium perfringens	50-100	luxuriant
ATCC 12924		
Clostridium sporogenes	50-100	luxuriant
ATCC 11437		
Enterococcus faecalis	50-100	luxuriant
ATCC 29212(00087*)		

Key: (*) - Corresponding WDCM numbers

Storage and Shelf Life

Store between 10-30°C in a tightly closed container and the prepared medium at 2-8°C. Use before expiry date on the label. On opening, product should be properly stored dry, after tightly capping the bottle in order to prevent lump formation due to the hygroscopic nature of the product. Improper storage of the product may lead to lump formation. Store in dry ventilated area protected from extremes of temperature and sources of ignition. Seal the container tightly after use. Product performance is best if used within stated expiry period.

Disposal

User must ensure safe disposal by autoclaving and/or incineration of used or unusable preparations of this product. Follow established laboratory procedures in disposing of infectious materials and material that comes into contact with clinical sample must be decontaminated and disposed of in accordance with current laboratory techniques (3,4).

Reference

1. Robertson, 1916, J. Pathol. Bacterial., 20:327.

2. Holdeman, Cato and Moore, 1977, Anerobic Laboratory Manual, 4th Ed, Virginia Polytechnical Institute and State University, Blacksburg, Va.

3. Isenberg, H.D. Clinical Microbiology Procedures Handbook 2nd Edition.

4. Jorgensen, J.H., Pfaller, M.A., Carroll, K.C., Funke, G., Landry, M.L., Richter, S.S and Warnock., D.W. (2015) Manual of Clinical Microbiology, 11th Edition. Vol. 1.

Revision :04/2024



Storage temperature

-30°C

Do not use if package is damaged

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 HiMediaTM 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. HiMediaTM 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.

HiMedia Laboratories Pvt. Ltd. Corporate Office : Plot No.C-40, Road No.21Y, MIDC, Wagle Industrial Area, Thane (W) - 400604, India. Customer care No.: 022-6147 1919 Email: techhelp@himedialabs.com Website: www.himedialabs.com