

Cooked Meat Medium with Glucose, Hemin and Vitamin K

Intended Use

Cooked Meat Medium with Glucose, Hemin and Vitamin K is used for cultivation of aerobes and anaerobes, especially pathogenic Clostridia and also for the maintenance of stock cultures.

Summary

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

Principle

The medium contains Beef Heart granules, 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.

Formula*

Ingredients	g/L
Beef heart, granules	98.0
Peptic digest of animal tissue	20.0
Sodium chloride	5.0
Glucose	5.0
Yeast extract	5.0
Hemin	0.005
Vitamin K	0.001
Final pH (at 25°C)	7.2 ± 0.2

*Adjusted to suit performance parameters

Storage and Stability

Store dehydrated medium below 30°C in tightly closed container and the prepared medium at 2°C-8°C. Avoid freezing and overheating. Use before expiry date on the label. Once opened keep powdered medium closed to avoid hydration.

Type of Specimen

Clinical samples

Specimen Collection and Handling

Ensure that all samples are properly labelled.

Follow appropriate techniques for handling samples as per established guidelines.

Some samples may require special handling, such as immediate refrigeration or protection from light, follow the standard procedure.

The samples must be stored and tested within the permissible time duration.

After use, contaminated materials must be sterilized by autoclaving before discarding.

Directions

1. Suspend 13.30 g of the powder in 100 mL purified / distilled water.
2. Mix thoroughly and allow to stand for 15 minutes until all the particles are thoroughly wetted.
3. Sterilize by autoclaving at 121°C (15 psi) for 15 minutes as per validated cycle.

Quality Control

Dehydrated Appearance: Brown coloured granules.

Prepared Appearance: Dark amber coloured, clear to slightly opalescent supernatant over insoluble granules.

Cultural Response: Cultural characteristics observed after an incubation at 35°C-37°C for 24-48 hours.

Organism (ATCC)	Growth
<i>Clostridium butyricum</i> (13732)	Good
<i>Clostridium perfringens</i> (12924)	Good
<i>Clostridium sporogenes</i> (11437)	Good
<i>Enterococcus faecalis</i> (29212)	Good

Interpretation of Results

The growth in this medium is indicated by the turbidity or bubble formation by some organisms. Blackening and disintegration of the meat particles 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.

Performance and Evaluation

Performance of the product is dependent on following parameters as per product label claim:

1. Directions
2. Storage
3. Expiry

Warranty

This product is designed to perform as described on the label and package insert. The manufacturer disclaims any implied warranty of use and sale for any other purpose.

Reference

1. Robertson, 1916, J. Pathol. Bacterial., 20:327.
2. Holdeman, Cato and Moore, 1977, *Aerobic Laboratory Manual*, 4th Ed, Virginia Polytechnical Institute and State University, Blacksburg, Va.
3. Data on file: Microexpress®, A Division of Tulip Diagnostics (P) Ltd.

Product Presentation:

Cat No.	Product description	Pack Size
201030180500	Dehydrated Culture Media	500 g

Disclaimer

Information provided is based on our inhouse technical data on file, it is recommended that user should validate at his end for suitable use of the product.
