LM Agar

M1001

Intended Use

Recommended for cultivation of fastidious anaerobic microorganisms from clinical and non-clinical samples.

Composition**

Ingredients	g / L
HML infusion powder#	20.000
Dextrose (Glucose)	0.750
Starch	0.750
Sodium sulphite	1.200
Ammonium ferric citrate	0.500
Agar	11.000
Final pH (at 25°C)	7.6±0.2

**Formula adjusted, standardized to suit performance parameters
Equivalent to Meat liver infusion powder

Directions

Suspend 34.20 grams in 1000 ml purified/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

Anaerobic bacteria live in an oxygen-free environment. Some anaerobic bacteria actually die if oxygen is present, while others fail to grow and multiply (1). HML infusion powder provides adequate degree of anaerobiosis and is also rich source of growth nutrients, which enables even the strict and fastidious anaerobes to grow well. Some anaerobes (e.g. certain *Clostridium* species) reduce the sulphite present in the medium to hydrogen sulphide (H_2S) which is indicated by the blackening of colonies due to presence of ferric ammonium citrate. Inoculation can be performed by the pour plate method or by surface smearing.

Type of specimen

Clinical samples- respiratory exudates, Food samples.

Specimen Collection and Handling

For clinical samples follow appropriate techniques for handling specimens as per established guidelines (2,3).
For food samples, follow appropriate techniques for sample collection and processing as per guidelines (4).
After use, contaminated materials must be sterilized by autoclaving before discarding.

Warning and Precautions

In Vitro diagnostic Use. 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. Further biochemical and serological test must be carried out for complete identification.
2. Individual organisms differ in their growth requirement and may show variable growth patterns on the medium.
3. Each lot of the medium has been tested for the organisms specified on the COA. It is recommended to users to validate the medium for any specific microorganism other than mentioned in the COA based on the user's unique requirement.

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

Light yellow to light brown homogeneous free flowing powder

Gelling

Firm, comparable with 1.1% Agar gel

Colour and Clarity of prepared medium

Brown coloured opalascent gel with suspended particles forms in Petri plates.

Reaction

Reaction of 3.42% w/v aqueous solution at 25°C. pH : 7.6±0.2

pH

7.40-7.80

Cultural Response

Cultural characteristics observed under anaerobic condition, after an incubation at 35-37°C for 18-48 hours.

Organism	Inoculum (CFU)	Growth	Recovery	H_2S
Clostridium perfringens ATCC 12924	50-100	luxuriant	>=50%	positive
Clostridium tetani ATCC 10779	50-100	luxuriant	>=50%	positive
Escherichia coli ATCC 25922 (00013*)	50-100	luxuriant	>=50%	negative
Proteus mirabilis ATCC 25933	50-100	luxuriant	>=50%	negative or weakly positive
Clostridium botulinum ATCC 25763	50-100	luxuriant	>=50%	positive
Bacteroides vulgatus ATCC 8482	50-100	good-luxuriant	>=50%	negative

Key : (*) Corresponding WDCM numbers.

Storage and Shelf Life

Store between 10-30°C in a tightly closed container and the prepared medium at 20-30°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 (2,3).

Reference

1. Alcamo E. I., 2001, Fundamentals of Microbiology, 6th Ed., Jones and Bartlett Publishers
2. Isenberg, H.D. Clinical Microbiology Procedures Handbook 2nd Edition.
3. 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.
4. Salfinger Y., and Tortorello M.L. Fifth (Ed.), 2015, Compendium of Methods for the Microbiological Examination of Foods, 5th Ed., American Public Health Association, Washington, D.C.

Revision : 04/2024

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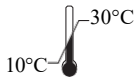
IVD *In vitro* diagnostic medical device



Storage temperature

EC REP CEpartner4U, Esdoornlaan 13,
3951DB Maarn, NL
www.cepartner4u.eu

CE Marking

Do not use if package is damaged

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