Ready Prepared Media

Technical Information

Anaerobic Blood Agar Plate

Product Code: PM 1975A

Application: Recommended for cultivation of anaerobic microorganisms including very fastidious organisms from clinical specimens.

Composition**

Ingredients	Gms / Litre
Tryptone	15.000
Soya peptone	5.000
Yeast extract	5.000
Sodium chloride	5.000
L-Cysteine	0.500
Hemin	0.005
Agar	13.500
Sheep blood	100.000ml
Final pH (at 25°C)	7.4±0.2

**Formula adjusted, standardized to suit performance parameters

Principle & Interpretation

Anaerobic Blood Agar base serves as a nutritious, nonselective medium allowing the cultivation of not only fastidious anaerobes but also of aerobic and microaerophillic microorganisms (1). It promotes both typical pigment formation in Bacteroides melaningenicus and displays double haemolytic reaction in *Clostridium perfringens* with added blood to the medium base. The inner zone of haemolysis is due to toxin and the outer zone of incomplete haemolysis to toxin (lecithinase activity).

Tryptone, soya peptone and yeast extract in the medium provides carbon and nitrogenous source, long chain amino acids, vitamins and other essential nutrients. Presence of Hemin and Vitamin K1 supports the growth of typical fastidious bacteria like Bacteroides species and gram positive spore bearers like *Clostridium* species. Addition of blood provides nutrientsand helps to differentiate haemolytic organisms. Sodium chloride helps in maintaining the osmotic equilibrium.

Type of specimen

Clinical samples- stool, abscess, etc.

Specimen Collection and Handling

For clinical samples follow appropriate techniques for handling specimens as per established guidelines (2,3).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 pack. Wear protective gloves/ protective clothing/eye protection/ face protection. Follow good microbiological lab practices while handling specimensand 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. Individual organisms differ in their growth requirement and may show variable growth patterns on the medium
2. Each lot of the medium has been tested for the organisms specified on the COA. It is recommended to users to validatethe medium for any specific microorganism other than mentioned in the COA based on the user's unique requirement.
3. Further biochemical and serological tests must be carried out for complete identification.

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.

Methodology

Either streak, inoculate or surface spread the test inoculum (50-100 CFU) aseptically on the plate.

Quality Control

Appearance
Sterile Anaerobic Blood Agar in 90 mm disposable plates with smooth surface and absence of black particles/cracks/ bubbles.
Colour of medium
Red coloured medium
Quantity of medium
25 ml of medium in 90 mm disposable plates.
pH
7.20-7.60
Sterility Test
Passes release criteria
Cultural Response
Cultural characteristics observed after 24-48 hours at 35-37°C with 5-10% CO_2

Oragnism	**Growth**
Bacteroides fragilis ATCC25285	Luxuriant
Bacteroides melaninogenicus ATCC25611	Luxuriant
Peptostreptococcus anaerobius ATCC 27337	Luxuriant

Key : * - Corresponding WDCM numbers

Storage and Shelf Life

On receipt store between 2-8°C Use before expiry date on the label. 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 sample must be decontaminated and disposed of in accordance with current laboratory techniques (2,3)

Further Reading

1. Dowell, Jr., V.R., Lombard,G.L, Thompson,F.S, Armfield,A.Y.: Media for isolation, characterization and identification of obligately anaerobic bacteria- US Department of Health and Human services, centers for Disease Control (1977).
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.

Disclaimer :

- User must ensure suitability of the product(s) in their application prior to use.
- The product conform solely to the technical information provided in this booklet and to the best of knowledge research and developmentwork 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.
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