Ready Prepared Media

Technical Information

Anaerobic Blood Agar Plate

Product Code: PM 2345

Application: Recommended for isolation and cultivation of Group A and Group B Streptococci from throat cultures and other clinical samples .

Composition**

Ingredients	Gms / Litre
Trptone	14.500
Soya peptone	5.000
Sodium chloride	5.000
Growth Factors	1.500
Agar	14.000
Neo Selective Supplement(FD149)	1 vial
Neomycin	30.000mg
Sterile defibrinated sheep blood	50ml
Final pH (at 25°C)	7.3±0.2

**Formula adjusted, standardized to suit performance parameters .

Principle & Interpretation

Group B streptococcus (GBS) infection is a common bacterial infection that is rarely serious in adults, but can be life- threatening to newborns. Group A Streptococci commonly causes strep throat and rarely, a potentially deadly destruction of flesh. Anaerobic Blood Agar Base with Neomycin Supplement is used for the isolation of Group A and Group B Streptococci from clinical specimens (1). This medium was originally formulated by Blanchette and Lawrence (2), by addition of the antibiotic Neomycin to sheep blood agar. This addition improved the detection of Group A & B Streptococci, while inhibiting the growth of the other accompanying haemolytic organisms.

Tryptone and soya peptone in the medium provide carbon and nitrogenous compounds, long chain amino acids, vitamins and other essential growth nutrients. Growth factors and defibrinated sheep blood together supply enrichment for growth of fastidious organisms. Sodium chloride helps in maintaining the osmotic equilibrium. Neo Selective Supplement (FD149) helps to suppress the normal flora thereby enhancing recovery of Group A and Group B Streptococci.

Type of specimen

Clinical samples- Throat swabs, Vaginal or rectal secretions

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. 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 usersto 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 storedat 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 90mm disposable plate with smooth surface and absence of black particles/cracks/bubbles
Colour
Cherry red coloured medium
Quantity
25 ml of medium in 90 mm plate
pH
7.10-7.50
Sterility Check

Passes release criteria

Cultural Response

Cultural characteristics observed in presence of 5-10% CO_2 after an incubation at 35-37°C for 24-48 hours

Organism	Inoculum(CFU)	Growth	Recovery	Haemolysis
Escherichia coli ATCC25922 (00013*)	50-100	non-poor	<=10%	None
Staphylococcus aureussubsp.aureus ATCC 25923 (00034*)	50-100	non-poor	<=10%	None
Streptococcus agalactiae ATCC 13813	50-100	good-luxuriant	>=50%	beta
Streptococcus pyogenes ATCC 19615	50-100	good-luxuriant	>=50%	beta

(*) - 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.

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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 samplemust be decontaminated and disposed of in accordance with current laboratory techniques (3,4).

Further Reading

1. Murray P. R., Baron J. H., Pfaller M. A., Jorgensen J. H. and Yolken R. H., (Ed.). 2003, Manual of Clinical Microbiology, 8th Ed., American Society for Microbiology, Washington, D.C.
2. Blanchette and Lawrence, 1967, Am. J. Clin. Pathol., 48-411.
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.

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 development work 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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- of diagnostic reagents extra.
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- Do not use the products if it fails to meet specificatons for identity and performens parameters.