Transgrow Medium Base

M1149

Intended Use:

With added supplement it is recommended for the cultivation and transport of fastidious microorganisms especially *Neisseria* species.

Composition**

Ingredients	g / L
Special peptone	15.000
Sodium chloride	5.000
Corn starch	1.000
Dipotassium hydrogen phosphate	4.000
Potassium dihydrogen phosphate	1.000
Agar	20.000
Final pH (at 25°C)	7.2±0.2

**Formula adjusted, standardized to suit performance parameters

Directions

Suspend 92.0 grams in 870 ml purified/distilled water to make a double strength base. 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. Aseptically add 100 ml sterile solution of FO Growth Supplement (FD022), 4 ml of V.C.N. Supplement (FD023) or 10 ml of V.C.N.T. Supplement (FD024) and 20 ml of Vitamino Growth Supplement (FD025). Mix well and pour into sterile Petri plates.

Principle And Interpretation

Gonococcus is a very fastidious organism and care should be taken in the collection of specimens and their transport to the laboratory. Best results are achieved by the direct inoculation of culture plates with patients secretions, followed by immediate incubation at 36-37°C in a moist atmosphere containing 5-10% CO_2. When direct plating and immediate incubation is impracticable, several transport and culture systems are available. These consist of a selective medium, usually present in small chambers containing CO_2 or a CO_2 generating system. Transgrow media can be inoculated directly from the patient and transported to the laboratory either before or after incubation.

Transport media are chemically defined, semisolid, non-nutritive, phosphate buffered media that provide a reduced environment. Transport media are formulated to maintain the viability of microorganisms without significant increase in growth. Thayer Martin Selective Agar was developed for the primary isolation of *Neisseria gonorrhoeae* and *Neisseria meningitides* from specimens containing heterogenous microflora taken from the throat, rectum and vagina (1,2,3). Martin et al modified Thayer Martin Agar by adding trimethoprim to develop Transgrow Medium with a carbon dioxide-enriched atmosphere to increase the selectivity of the medium (4).

Special peptone in the medium provides nutrients to the organisms while starch neutralizes the toxic fatty acids if present in the agar. Haemoglobin provides the factor-X whereas the factor-V is provided by the added supplement (FD025) that additionally also supplies vitamins, amino acids and coenzymes, which enhances the growth of pathogenic *Neisseria.* Trimethoprim, vancomycin and colistin inhibit gram-positive and gram-negative bacteria respectively (5). Nystatin inhibits fungi.

Type of specimen

Clinical samples - Vaginal secretions

Specimen Collection and Handling:

For clinical samples follow appropriate techniques for handling specimens as per established guidelines (6,7).

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. Further biochemical tests must be carried out for confirmation.
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

Cream to yellow homogeneous free flowing powder

Gelling

Firm, comparable with 2.0% Agar gel.

Colour and Clarity of prepared medium

Basal Medium: Light yellow coloured clear to slightly opalescent gel. After addition of haemoglobin, chocolate brown coloured, opaque gel forms in Petri plates.

Reaction

Reaction of 4.6% w/v aqueous solution at 25°C. pH : 7.2±0.2

pH

7.00-7.40

Cultural Response

Cultural characteristics observed after an incubation at 35-37°C for 40-48 hours with added sterile solution of FO Growth Supplement (FD022), V.C.N. Supplement (FD023) or V.C.N.T. Supplement (FD024) and Vitamino Growth Supplement (FD025).

Organism	Inoculum (CFU)	Growth	Recovery
Candida albicans ATCC 60193	50-100	none-poor	<=10%
Neisseria gonorrhoeae ATCC 43069	50-100	good	40-50%
Neisseria meningitidis ATCC 13090	50-100	good	40-50%
Staphylococcus epidermidis ATCC 12228 (00036*)	50-100	none-poor	<=10%

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 (6,7).

Reference

1. Mitchell M. S., Rhoden P. L. and Marcus B. B., 1966, Am. J. Epidem., 83:74.
2. Martin J. E., Billings T. E., Hackney J. F. and Thayer J. D., 1967, Public Health Rep. 82:361.
3. Thayer J. D. and Martin D. E., 1966, Pub Health Rep., 81:559.
4. Martin J. E., Armstrong J. H. and Smith P. B., 1974, Appl. Microbiol., 27:802.
5. MacFaddin J. F., 1985, Media of Isolation-Cultivation-Identification- Maintenance of Medical Bacteria, Vol. 1, Williams and Wilkins, Baltimore.
6. Isenberg, H.D. Clinical Microbiology Procedures Handbook 2nd Edition.
7. 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.

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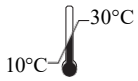
IVD *In vitro* diagnostic medical device



Storage temperature

EC REP CEpartner4U, Esdoornlaan 13,
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www.cepartner4u.eu

CE CE Marking

Do not use if package is damaged

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