microgen
Ready Prepared Media

Technical Information

Soyabean Casein Digest Agar Plate w/ 0.5% Lecithin and 4% Polysorbate 80

Product Code: PM 2943

Application: Recommended for the selection, isolation and identification of Methicillin Resistant *Staphylococcus aureus* from clinical specimens.

Composition**

Ingredients	Gms / Litre
Tryptone #	15.000
Soya peptone	5.000
Sodium chloride	5.000
Agar	15.000
Lecithin	5.000 ml
Polysorbate 80	40.000 ml
Final pH (at 25°C)	7.3±0.2

**Formula adjusted, standardized to suit performance parameters

Equivalent to Pancreatic digest of casein

Principle & Interpretation

Tryptone Soya Agar with Lecithin and Polysorbate 80 is used in RODAC (Replicate Organism Detection and Counting) plates (3) for the detection and enumeration of microorganisms present on surfaces of sanitary importance (6,8). Tryptone and Soya peptone provide nitrogenous compounds and other nutrients essential for microbial replication.Lecithin and polysorbate 80 (Tween 80) are neutralizers reported to inactivate residual disinfectants from where the sample is collected (1). Lecithin neutralizes quaternary ammonium compounds and polysorbate 80 neutralizes phenolic disinfectants, hexachlorophene, formalin and with lecithin ethanol (2) Collection of samples from areas before and after the treatment with disinfectant evaluates cleaning procedures in environmental sanitation. The presence and number of microorganisms is determined by the appearance of colonies on the agar surface (7). After counting the colonies, carry out biochemical testing for identification.

Type of specimen

Environmental monitoring samples

Specimen Collection and Handling

For Environmental monitoring samples follow appropriate techniques for sample collection, handling and processing.

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

Warning and Precautions

Read the label before opening the pack. Wear protective gloves/protective clothing/eye protection/ face protection. Follow good microbiological lab practices while handling specimens and culture. Standard precautions asper established guidelines should be followed while handling specimens. Safety guidelines may be referred in individual safety data sheets.

Limitations

1. Individual strain of a microorganism may have unique growth requirements with respect to nutrients and physical conditions. Based on which the growth pattern of each varies on a medium and some even may display significant delay in development.
2. 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.
3. It is recommended to store the plates ta 24-30°C to avoid minimum condensation

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 Soyabean Casein Digest Agar Plate w/ 0.5% Lecithin and 4% Polysorbate 80 in 90 mm disposable plates.
Colour
Light yellow coloured medium
Quantity
25 ml of medium in 90mm disposable plate
pH
7.10-7.50
Sterility Check

Passes release criteria

Cultural Response

Cultural characteristics was observed after an incubation for Bacterial at 30-35°C 18-24 hours and for Fungal at 30-35°C <=5days.

Organism	Inoculum(CFU)	Observed Lot value (CFU)	Recovery
Bacillus subtilis subsp.spizizenii ATCC 6633 (00003*)	50-100	35-100	>=70%
Staphylococcus aureussubsp. aureus ATCC 25923 (00034*)	50-100	35-100	>=70%
Staphylococcus aureussubsp. aureus ATCC 6538 (00032*)	50-100	35-100	>=70%
Escherichia coli ATCC25922 (00013*)	50-100	35-100	>=70%
Escherichia coli ATCC 8739(00012*)	50-100	35-100	>=70%
Escherichia coli ATCC11775 (00090*)	50-100	35-100	>=70%
Escherichia coli NCTC13167 (00179*)	50-100	35-100	>=70%
Escherichia coli NCTC 9002	50-100	35-100	>=70%
Pseudomonas aeruginosa ATCC 27853 (00025*)	50-100	35-100	>=70%
Pseudomonas aeruginosa ATCC 9027 (00026*)	50-100	35-100	>=70%
Pseudomonas aeruginosa ATCC 10145 (00024*)	50-100	35-100	>=70%
Salmonella Abony NCTC 6017 (00029*)	50-100	35-100	>=70%

Micrococcus luteus ATCC 9341	50-100	35-100	>=70%
Streptococcus pneumoniae ATCC 6305	50-100	35-100	>=70%
Salmonella Typhimurium ATCC 14028 (00031*)	50-100	35-100	>=70%
Enterococcus faecalis ATCC 29212 (00087*)	50-100	35-100	>=70%
Candida albicans ATCC 10231 (00054*)	50-100	35-100	>=70%
Candida albicans ATCC 2091 (00055*)	50-100	35-100	>=70%
# *Aspergillus brasiliensis* ATCC 16404 (00053*)	50-100	25-70	50-70%
Clostridium perfringenes ATCC 13124 (00007*)	50-100	35-100	>=70%

Key : (#)- Formerly known as Aspergillus niger (*) - Corresponding WDCM numbers

Storage and Shelf Life

- On receipt store between 20-30°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 (4,5).

Further Reading

1. Forbes B. A., Sahm A. S. and Weissfeld D. F., 1998, Bailey and Scotts Diagnostic Microbiology, 10th Ed., Mosby Inc. St. Louis, Mo
2. Gunn B. A., Ohashi D K., Gaydos C. A., Holt E. S., 1977, J. Clin. Microbiol., 5(6) : 650.
3. Indian Pharmacopoeia, 2018, Govt. of India, Ministry of Health and Family Welfare, New Delhi, India.
4. Isenberg, H.D. Clinical Microbiology Procedures Handbook. 2nd Edition.
5. 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.
6. The United States Pharmacopoeia , 2019, The United States Pharmacopoeial Convention Inc., Rockville, MD.

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
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