Soyabean Casein Digest Agar Plate w/ Lecithin and Tween 80, w/ β-Lactamase II (Tryptone Soya Agar Plate w/ Lecithin and Tween 80 w/ β-Lactamase II) (Lockable, γ irradiated, Triple Pack) MP1808LGT

Intended use

Recommended for determining efficiency of containers, equipment surfaces, water miscible cosmetics and for inactivation of cephalosporins of first, second, third and fourth generation.

Composition**

Ingredients	g / L
Tryptone	15.000
Soya Peptone	5.000
Sodium chloride	5.000
Lecithin	0.700
Polysorbate 80 (Tween 80)	5.000
Agar	15.000
Glycerol	10.000 ml
β-lactamase II	4.5 IU/plate
Final pH (at 25°C)	7.3±0.2

**Formula adjusted, standardized to suit performance parameters

Directions

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

Principle And Interpretation

Tryptone Soya Agar with Lecithin and Polysorbate 80 is used in RODAC (Replicate Organism Detection and Counting plates (1) for the detection and enumeration of microorganisms present on surfaces of sanitary importances (2,3). 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 (4). Lecithin neutralizes quaternary ammonium compounds and polysorbate 80 neutralizes phenolic disinfectants, hexachlorophene, formalin and with lecithin ethanol (5). β-lactamase II inactivates of penicillins, cephalosporins of first, second, third and fourth generation and penems. Glycerol serves as an additional source of energy. 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 (6). After counting the colonies, carry out biochemical testing for identification.

Type of specimen

Swabs of containers, Equipment surfaces, Water miscible cosmetics etc.

Specimen Collection and Handling

For swabs of containers, equipment surfaces, water miscible cosmetics samples follow appropriate techniques for handling specimens as per established guidelines (4). After use, contaminated materials must be sterilized by autoclaving before discarding.

Warning and Precautions

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 specimens. Safety guidelines may be referred in individual safety data sheets.

Limitations

1.This medium is general purpose medium and may not support the growth of fastidious organisms.
2.Further biochemical and serological test 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.

Quality Control

Appearance

Sterile Tryptone Soya Agar w/Tween 80 and lecithin and w/ 4.5 IU per plate of β-Lactamase II in 90mm disposable plates with smooth surface & absence of black particles/ cracks/ bubbles (Lockable, γ irradiated, Triple Pack)

Colour of medium

Light yellow coloured medium.

Quantity of Medium

30ml of medium in 90mm plates.

pH

7.10-7.50

Sterility check

Passes release criteria

Dose of gamma irradiation

13.00-20.00 kgy

Cultural Response

Growth Promotion Test of as such plates was carried out and growth was observed after incubation at 30-35°C for < = 3 days. Simultaneously growth promotion test was carried out on plates which were seeded with 1 mcg/ml of respective antibiotics.

Recovery Rate

Recovery rate is considered 100% for bacteria growth on Soyabean Casein Digest Agar.

Organism	Inoculum (CFU)	Growth	Lot value (CFU)	Incubation temperature	Incubation period	Recovery
***Escherichia coli* ATCC 25922 (00013*)**						
w/o antibiotic	50 -100	Luxuriant	35 -100	30 -35 °C	18 -24 hrs	>=70 %
w/ Cephalothin		Luxuriant	35 -100	30 -35 °C	18 -24 hrs	>=70 %
w/ Cefamandole		Luxuriant	35 -100	30 -35 °C	18 -24 hrs	>=70 %
w/ Cefotaxime		Luxuriant	35 -100	30 -35 °C	18 -24 hrs	>=70 %
w/ Ceftazidime		Luxuriant	35 -100	30 -35 °C	18 -24 hrs	>=70 %
w/ Cefepime		Luxuriant	35 -100	30 -35 °C	18 -24 hrs	>=70 %
w/ Imipenem		Luxuriant	35 -100	30 -35 °C	18 -24 hrs	>=70 %
***Staphylococcus aureus* subsp. *aureus* ATCC 25923 (00034*)**						
w/o antibiotic	50 -100	Luxuriant	35 -100	30 -35 °C	18 -24 hrs	>=70 %
w/ Cephalothin		Luxuriant	35 -100	30 -35 °C	18 -24 hrs	>=70 %
w/ Cefamandole		Luxuriant	35 -100	30 -35 °C	18 -24 hrs	>=70 %
w/ Cefotaxime		Luxuriant	35 -100	30 -35 °C	18 -24 hrs	>=70 %
w/ Ceftazidime		Luxuriant	35 -100	30 -35 °C	18 -24 hrs	>=70 %
w/ Cefepime		Luxuriant	35 -100	30 -35 °C	18 -24 hrs	>=70 %
w/ Penicillin		Luxuriant	35 -100	30 -35 °C	18 -24 hrs	>=70 %
***Staphylococcus aureus* subsp. *aureus* ATCC 29213 (00131*)**						
w/o antibiotic	50 -100	Luxuriant	35 -100	30 -35 °C	18 -24 hrs	>=70 %
w/ Penicillin		Luxuriant	35 -100	30 -35 °C	18 -24 hrs	>=70 %
***Pseudomonas aeruginosa* ATCC 27853 (00025*)**						
w/o antibiotic	50 -100	Luxuriant	35 -100	30 -35 °C	18 -24 hrs	>=70 %
w/Cefotaxime		Luxuriant	35 -100	30 -35 °C	18 -24 hrs	>=70 %
w/Ceftazidime		Luxuriant	35 -100	30 -35 °C	18 -24 hrs	>=70 %
w/Cefepime		Luxuriant	35 -100	30 -35 °C	18 -24 hrs	>=70 %
w/Imipenem		Luxuriant	35 -100	30 -35 °C	18 -24 hrs	>=70 %

Growth promoting						
Candida albicans ATCC 10231 (00054*)	50 -100	luxuriant	35 -100	30 -35 °C	<=5 d	>=70 %
Candida albicans ATCC 2091 (00055*)	50 -100	luxuriant	35 -100	30 -35 °C	<=5 d	>=70 %
# *Aspergillus brasiliensis* ATCC 16404 (00053*)	50 -100	Good-luxuriant	25 -70	30 -35 °C	<=5 d	50 -70 %
# *Aspergillus brasiliensis* ATCC 16404 (00053*)	50 -100	Luxuriant	35 -100	20 -25 °C	<=5 d	>=70 %

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

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 (7,8).

Reference

1. Hall and Hartnett, 1964, Public Hlth. Rep., 79:1021.
2. MacFaddin J.F., 1985, Media for Isolation-Cultivation-Identification-Maintenance of Medical Bacteria, Vol. I, Williams and Wilkins, Baltimore.
3. Richardson (Ed)., 1985, Standard Methods for the Examination of Dairy Products, 15th ed., APHA, Washington, D.C.
4. Brummer, 1976, Appl. Environ. Microbiol., 32:80.
5. Favero (Chairm), 1967, Biological Contamination Control Committee, a state of the art report., Am. Assoc. for contamination control.
6. Murray PR, Baron, Pfaller, and Yolken (Eds.), 2003, In Manual of Clinical Microbiology, 8th ed., ASM, Washington, D.C.
7. MacFaddin J.F., 1985, Media for Isolation-Cultivation-Identification-Maintenance of Medical Bacteria, Vol. I, Williams and Wilkins, Baltimore.
8. Isenberg, H.D. Clinical Microbiology Procedures Handbook 2nd Edition.
9. 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.

Revision : 00/2025

Disclaimer :

User must ensure suitability of the product(s) in their application prior to use. Products conform solely to the information contained in this and other related HiMedia™ publications. The information contained in this publication is based on our research and development work and is to the best of our knowledge true and accurate. HiMedia™ Laboratories Pvt Ltd reserves the right to make changes to specifications and information related to the products at any time. Products are not intended for human or animal or therapeutic use but for laboratory,diagnostic, research or further manufacturing use only, unless otherwise specified. Statements contained herein should not be considered as a warranty of any kind, expressed or implied, and no liability is accepted for infringement of any patents.