Soyabean Casein Digest Agar Plate w/ 1%Glycerol, 0.5% polysorbate 80, 0.07% Soya lecithin & 5IU/plate B-lactamase mixture.

MP5280GT

Intended Use:

For cultivation of wide variety of aerobes and fungi and for inactivation of Penicillinc, cephalosporis of first , second, third and fourth generation and penems.

Composition**

Ingredients	Gms / Litre
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
Beta-lactamase mixture/Plate	5.000

**Formula adjusted, standardized to suit performance parameters

Directions

Either streak, inoculate or surface spread the test inoculum (50-100 CFU) aseptically on the plate. Alternatively this medium can also be used for environmental monitoring of clean rooms in production areas of Pharmaceutical industries where production of antibiotics like Penicillins is carried out.

Principle And Interpretation

Soyabean Casein Digest Agar with Glycerol, polysorbate 80, Soya lecithin and beta-lactamase is used in plates (1) for the detection and enumeration of microorganisms present on surfaces of sanitary importances (2, 3) and also in environmental monitoring of clean room for facilities where production of Penicillins is carried out.

Casein enzymic hydrolysate and papaic digest of soyabean meal 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).Beta-lactamase mixture added in the medium will inactivate the beta-lactam antibiotics thus enabling the growth of resistant strains present in the environment of clean rooms where production of antibiotics is carried out.

Warning and Precautions

In Vitro diagnostic 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.

Performance and Evaluation

Performace 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 Soyabean Casein Digest Agar Plate w/1% Glycerol, 0.5% Polysorbate 80, 0.07% Soya Lecithin & Beta-Lactamase mixture (5 IU/Plate) in 90mm disposable plates and absence of black particles/cracks/bubbles. (gamma-irradiated) (Triple pack).

Colour
Light yellow coloured medium.

Quantity of Medium
30ml of medium in 90mm disposable plates.

Reaction
7.10- 7.50

Dose of Irradiation (Kgy)
13.00- 20.00

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 for bacterial cultures and at 20-25°C for ≤ 5 days for fungal cultures. Simultaneously growth promotion test was carried out on plates which were seeded with 1mcg/ml of respective antibiotics.

Organism	Inoculum (CFU)	Growth	Lot value (CFU)	Recovery	Incubation temperature	Incubation period
Escherichia coli ATCC 25922						
w/o antibiotic	50 -100	Luxuriant	35 -100	>=70 %	30 -35 °C	18 -24 hrs
w/ Cephalothin		Luxuriant	35 -100	>=70 %	30 -35 °C	18 -24 hrs
w/ Cefamandole		Luxuriant	35 -100	>=70 %	30 -35 °C	18 -24 hrs
w/ Cefotaxime		Luxuriant	35 -100	>=70 %	30 -35 °C	18 -24 hrs
w/ Ceftazidime		Luxuriant	35 -100	>=70 %	30 -35 °C	18 -24 hrs
w/ Cefepime		Luxuriant	35 -100	>=70 %	30 -35 °C	18 -24 hrs
w/ Imipenem		Luxuriant	35 -100	>=70 %	30 -35 °C	18 -24 hrs
w/ Meropenem		Luxuriant	35 -100	>=70 %	30 -35 °C	18 -24 hrs
Staphylococcus aureus ATCC 25923						
w/ Penicillin		Luxuriant	35 -100	>=70 %	30 -35 °C	18 -24 hrs
Growth promoting						
Candida albicans ATCC 10231	50 -100	luxuriant	35 -100	>=70 %	30 -35 °C	<=5 d
Candida albicans ATCC 2091	50 -100	luxuriant	35 -100	>=70 %	30 -35 °C	<=5 d
Aspergillus brasiliensis ATCC 16404	50 -100	Good-luxuriant	25 -70	50 -70 %	30 -35 °C	<=5 d
Aspergillus brasiliensis ATCC 16404	50 -100	Luxuriant	35 -100	>=70 %	20 -25 °C	<=5 d

Sterility Check
Passes release criteria.

Storage and Shelf Life

Store between 20-30°C. Use before expiry date on the label.

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).

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