

Sabouraud Chloramphenicol Agar

Intended Use

Sabouraud Chloramphenicol Agar is used for selective cultivation of Yeasts and Moulds.

Summary

This medium was described originally by Sabouraud for the cultivation of fungi, particularly useful for the fungi associated with skin infections. The medium is often used with antibiotics such as Chloramphenicol for the isolation of pathogenic fungi from materials containing large numbers of fungi or bacteria.

Principle

Tryptone and peptone provide nitrogenous and carbonaceous compounds, long chain amino acids, and other essential growth nutrients. Dextrose acts as an energy source. Chloramphenicol inhibits a wide range of Gram-positive and Gram-negative bacteria which makes the medium selective for fungi. The low pH favours fungal growth and inhibits contaminating bacteria from clinical specimens.

Formula*

Ingredients	g/L
Tryptone	5.0
Peptone	5.0
Dextrose	40.0
Chloramphenicol	0.05
Agar	15.0
Final pH (at 25°C)	5.6 ± 0.2

*Adjusted to suit performance parameters.

Storage and Stability

Store the dehydrated powder and prepared medium on receipt between 15-25°C in a tightly closed container. Avoid freezing and overheating. Use before expiry date on the label. Once opened keep powdered medium closed to avoid hydration.

Type of specimen

Clinical samples - Blood; Food and Dairy samples.

Specimen Collection and Handling

Ensure that all samples are properly labelled. Follow appropriate techniques for handling samples as per established guidelines. Some samples may require special handling, such as immediate refrigeration or protection from light, follow the standard procedure. The samples must be stored and tested within the permissible time duration. After use, contaminated materials must be sterilized by autoclaving before discarding.

Directions

1. Suspend 65.05 g of the powder in 1000 mL purified / distilled water and mix thoroughly.
2. Boil with frequent agitation to dissolve the powder completely.
3. Sterilize by autoclaving at 121°C (15 psi) for 15 minutes as per validated cycle.

Quality Control

Dehydrated Appearance: Cream to light yellow coloured, homogenous, free flowing powder.

Prepared Appearance: Light yellow to amber coloured, clear to slightly opalescent gel forms in petridishes.

Growth Promotion Test: Growth promotion is carried out in accordance with the harmonized method of USP/EP/JP/IP and growth is observed after an incubation at 30°C-35°C for 48 hours for bacteria and at 20°C-25°C for ≤ 5 days for fungi.

Growth Promoting Properties: The test results observed are within the specified temperature and shortest period of time specified in the test, inoculating ≤ 100 cfu of appropriate microorganism at 20°C-25°C for ≤ 5 days.

Inhibitory Properties: No growth of the test microorganism occurs for the specified temperature and not less than the longest period of the time specified, inoculating >100 cfu of the appropriate microorganism at 30°C-35°C for ≥ 48 hours.

Organism (ATCC)	Growth
<i>Candida albicans</i> 3147 (10231)	Good
<i>Saccharomyces cerevisiae</i> NRRL Y-567 (9763)	Good
<i>Aspergillus brasiliensis</i> WLRI 034(120) (16404)	Good

Inhibitory	
<i>Escherichia coli</i> (8739)	Inhibited

Note:

1. For inhibition no growth of test microorganism should occur.

Interpretation of Results

1. Identification of fungi is done by observing colony morphology, characteristic microscopic structures, rate of growth etc.
2. Yeasts are identified by various biochemical tests.

For spread plate and pour plate method: Count the number of colonies and express as colony forming units (cfu) per gram or mL of sample, taking into account the applicable dilution factor.

Performance and Evaluation

Performance of the product is dependent on following parameters as per product label claim:

1. Directions
2. Storage
3. Expiry

Precautions/Limitations

1. Some of the pathogenic fungi may produce infective spores, which can be easily dispersed in the laboratory. Examine such organisms only within a protective cabinet.
2. When used for selective isolation, antimicrobials like chloramphenicol and cycloheximide may inhibit some pathogenic fungi. However, the mycelial phase of *Histoplasma capsulatum*, *Paracoccidioides brasiliensis*, *Sporothrix schoenckii* and *Blastomyces dermatidis* is not inhibited by these antibiotics when incubated at 25°C-30°C.
3. A non-selective and selective medium should be inoculated for isolation of fungi from potentially contaminated specimens.

Warranty

This product is designed to perform as described on the label and package insert. The manufacturer disclaims any implied warranty of use and sale for any other purpose.

Reference

1. Sabouraud K., 1892, Ann. Dermatol. Syphilol, 3:1061.
2. Ajello L., 1957, J. Chron. Dis., 5:545.
3. Lorian (Ed.), 1980, Antibiotics In Laboratory Medicine, Williams and Wilkins, Baltimore.
4. Murray, P. R 2005, In Manual of Clinical Microbiology, 7th ed., ASM, Washington, D.C
5. Data on file: Microexpress®, A Division of Tulip Diagnostics (P) Ltd.

Product Presentation:

Cat No.	Product description	Pack Size
201191830100	Dehydrated Culture Media	100 g
201191830500	Dehydrated Culture Media	500 g
201191832500	Dehydrated Culture Media	2.5 k
203190470100	Bottle Media	100 mL
203190470250	Bottle Media	6 x 250 mL
203190480012	Ready Prepared Slant	12 Slants
205190880100	Ready Prepared Plate	(90 mm) 100 Plates

Disclaimer

Information provided is based on our inhouse technical data on file, it is recommended that user should validate at his end for suitable use of the product.