SABOURAUD DEXTROSE AGAR W/ CHLORAMPHENICOL (7306)

Intended Use
Sabouraud Dextrose Agar W/ Chloramphenicol is used for the selective isolation of fungi.

Product Summary and Explanation
Sabouraud Dextrose Agar (SDA) is a modification of Dextrose Agar described by Sabouraud.[1] Sabouraud Dextrose Agar is used for cultivating pathogenic and commensal fungi and yeasts. The high dextrose concentration and acidic pH of the formula permits selectivity of fungi.[2] This medium is beneficial in sporulation studies and pigment production. Sabouraud Dextrose Agar is used for determining the microbial content of cosmetics,[3] in the mycological evaluation of food,[4,5] and clinically to aid in the diagnosis of yeast and fungal infections.[6,7]

Sabouraud Dextrose Agar W/ Chloramphenicol is a modification of Sabouraud Dextrose Agar, with the addition of Chloramphenicol to increase selectivity against commensal microorganisms.

Principles of the Procedure
Enzymatic Digest of Casein and Enzymatic Digest of Animal Tissue provide the nitrogen and vitamin sources required for organism growth in Sabouraud Dextrose Agar W/ Chloramphenicol. The high concentration of Dextrose is included as an energy source. Chloramphenicol is a broad-spectrum antibiotic inhibitory to a wide range of Gram-negative and Gram-positive bacteria. Agar is the solidifying agent.

Formula / Liter
Enzymatic Digest of Casein ..... 5 g
Enzymatic Digest of Animal Tissue..... 5 g
Dextrose..... 40 g
Chloramphenicol..... 0.05 g
Agar ..... 15 g
Final pH: 5.6 ± 0.2 at 25°C
Formula may be adjusted and/or supplemented as required to meet performance specifications.

Precautions
1. For Laboratory Use.

Directions
1. Suspend 65 g of the medium in one liter of purified water.
2. Heat with frequent agitation and boil for one minute to completely dissolve the medium.
3. Autoclave at 121°C for 15 minutes.

Quality Control Specifications
Dehydrated Appearance: Powder is homogeneous, free flowing, and light beige.

Prepared Appearance: Prepared medium is trace to slightly hazy and amber.

Expected Cultural Response: Cultural response on Sabouraud Dextrose Agar W/ Chloramphenicol at 25 - 30°C and examined for growth after 2 - 7 days of incubation.

Microorganism	Approx Inoculum (CFU)	Expected Results
Aspergillus niger ATCC® 16404	Point Innoculation	Growth
Candida albicans ATCC® 10231	10 - 300	Growth
Escherichia coli ATCC® 25922	300 – 1000	Inhibited
Microsporum canis ATCC® 36299	Point Innoculation	Growth
Trichophyton mentagrophytes ATCC® 9533	Point Innoculation	Growth

The organisms listed are the minimum that should be used for quality control testing.

Test Procedure
Consult appropriate references for recommended test procedures on the isolation and identification of yeast and molds.

Results
Yeasts grow creamy to white colonies. Molds will grow as filamentous colonies of various colors. Refer to appropriate references for a complete discussion on yeast and molds.

Storage
Store sealed bottle containing the dehydrated medium at 2 - 30°C. Once opened and recapped, place container in a low humidity environment at the same storage temperature. Protect from moisture and light by keeping container tightly closed.

Expiration
Refer to expiration date stamped on the container. The dehydrated medium should be discarded if not free flowing, or if the appearance has changed from the original color. Expiry applies to medium in its intact container when stored as directed.

Limitations of the Procedure
1. Some strains may be encountered that grow poorly or fail to grow on this medium.
2. Antimicrobial agents incorporated into a medium to inhibit bacteria may also inhibit certain pathogenic fungi.
3. This medium is sensitive to over-heating, due to the low pH, and could cause agar to soften.

Packaging
Sabouraud Dextrose Agar W/ Chloramphenicol	**Code No.**	**7306A**	**500 g**
		7306B	**2 kg**
		7306C	**10 kg**

References

1. **Sabouraud, R.** 1892. Ann. Dermatol. Syphilol. **3**:1061.
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3. **Curry, A. S., J. G. Graf, and G. N. McEwen, Jr. (eds.).** 1993. CTFA Microbiology Guidelines. The Cosmetic, Toiletry, and Fragrance Association, Washington, D.C.
4. **Marshall, R. T. (ed.).** 1993. Standard methods for the microbiological examination of dairy products, 16th ed. American Public Health Association, Washington, D.C.
5. **U.S. Food and Drug Administration.** 1995. Bacteriological analytical manual, 8thed. AOAC International, Gaithersburg, MD.
6. **Murray, P. R., E. J. Baron, M. A. Pfaller, F. C. Tenover, and R. H. Yolken (eds.).** Manual of clinical microbiology, 6th ed. American Society for Microbiology, Washington, D.C.
7. **MacFaddin, J. F.** 1985. Media for isolation-cultivation-identification-maintenance of medical bacteria, vol.1. Williams & Wilkins, Baltimore, MD.

Technical Information
Contact Acumedia Manufacturers, Inc. for Technical Service or questions involving dehydrated culture media preparation or performance at (517)372-9200 or fax us at (517)372-2006.

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