

SABOURAUD DEXTROSE AGAR WITH CHLORAMPHENICOL AND GENTAMYCIN

Intended Use

Sabouraud Dextrose Agar with Chloramphenicol and gentamycin 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 with Chloramphenicol and gentamycin is a modification of Sabouraud Dextrose Agar, with the addition of Chloramphenicol and gentamycin 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	5,0 g
Enzymatic Digest of Animal Tissue.....	5,0 g
Dextrose	40,0 g
Chloramphenicol	0,05 g
Agar	15,0 g

Supplements / Liter:

Gentamycin..... .0,05 g

Final pH: 5.6 ± 0.2 at 25°C

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.
4. Add aseptically gentamycin supplement.

Quality Control Specifications

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

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

Microorganism	Approx Inoculum (CFU)	Expected Results
<i>Aspergillus niger</i> ATCC® 16404	Point Inoculation	Growth
<i>Candida albicans</i> ATCC® 10231	10 - 300	Growth
<i>Escherichia coli</i> ATCC® 25922	300 – 1000	Inhibited
<i>Pseudomonas aeruginosa</i> ATCC® 10145	300 – 1000	Inhibited
<i>Microsporium canis</i> ATCC® 36299	Point Inoculation	Growth
<i>Trichophyton mentagrophytes</i> ATCC 9533	Point Inoculation	Growth

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 6-12°C

Expiration 90 days

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 with Chloramphenicol and Gentamycin **Code No. 201232**

References

1. **Sabouraud, R.** 1892. Ann. Dermatol. Syphilol. **3**:1061.
2. **Jarett, L., and A. C. Sonnenwirth (eds.)**. 1980. Gradwohl's and parasitic infections, 7th ed. American Public Health Association, Washington, D.C.
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, 8th ed. AOAC International, Gaithersburg, MD.
6. **Murray, P. R., E. J. Baron, M. A. Pfaller, F. C. Tenover, and R. H. Tenover (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.



Graso Biotech
Krag 4A. 83-200 Starogard Gdański
Dział Obsługi Klienta: 058 562 30 21, 058 562 56 61 do 64 wew. 30,
zamowienia@graso.com.pl; www.podloza.pl, www.grasobiotech.pl