

Sabouraud-glucose Agar with Chloramphenicol

Catalog : HB0235-11-500

Sabouraud-glucose Agar with Chloramphenicol is used for the isolation of mold and yeast.

Approximate Formula:

Ingredients	gm./liter
Mixture of equal parts of Peptic Digest of Animal Tissue and Pancreatic Digest of Casein	10.0
Dextrose	40.00
Chloramphenicol	0.05
Agar	15.00

Final pH 5.6±0.2 at 25 °C

*Adjusted and/or supplemented as required to meet performance criteria.

Directions:

Suspend 65.1g of the medium in one liter of deionized or distilled water. Mix well and heat with frequent agitation. Sterilize in an autoclave at 121°C for 15 minutes. When cooling to 50-55 °C, mix thoroughly, pour into sterile petri dishes.

Principle and Interpretation:

Peptic digest of animal tissue and pancreatic digest of casein act as a source of carbon, nitrogen and other essential growth nutrients. Dextrose (D(+)-Glucose) is the fermentable carbohydrate. The relatively high carbohydrate concentration of 4 % enhances fungal growth. The pH of 5.6 and the high dextrose concentration inhibits bacterial growth. The inhibition can be enhanced by adjusting the pH to extreme values (approx. 3.5 or 10.0). Chloramphenicol is used as a strong inhibitor, used for heavily contaminated material.

Appearance:

Dehydrated medium is a free-flowing yellowish powder. The prepared medium is a kind of yellowish transparent gel.

Precautions:

This medium is for laboratory use only. Dried medium which is past shelf life, caking or color variation cannot be used.

Storage conditions and Shelf life:

Sabouraud-glucose Agar with Chloramphenicol must be stored tightly capped in the original container at 5-30°C. The dehydrated medium has a shelf life of 5 years from date of manufacturing. Prepared medium may be stored, out of direct light at 2-8°C.

Quality control:

Prepare the culture medium as per label directions. Inoculate and incubate at 20-25°C for 48-72 hours.

Microorganism	Strains Number	Inoculum(CFU)	Growth	Recovery	Remarks
<i>Aspergillus Niger</i>	ATCC 16404	20-200	Luxuriant	≥70%	White hypha
<i>Candida Albicans</i>	ATCC 10231	20-200	Luxuriant	≥70%	Cream colonies
<i>Escherichia coli</i>	ATCC 25922	>10 ³	Inhibited	/	/
<i>Staphylococcus aureus</i>	ATCC 6538	>10 ³	Inhibited	/	/

References:

1. United States Pharmacopeial Convention, Inc. 2008. The United States pharmacopeia 31/The nationalformulary 26, Supp. 1, 8-1-08, online. United States Pharmacopeial Convention, Inc., Rockville, Md.
2. European Directorate for the Quality of Medicines and Healthcare. 2008. The European pharmacopoeia, 6th ed., Supp. 1, 4-1-2008, online. European Directorate for the Quality of Medicines and Healthcare, Council of Europe, 226 Avenue de Colmar BP907-, F-67029 Strasbourg Cedex 1, France.
3. Ajello, Georg, Kaplan and Kaufman. 1963. CDC laboratory manual for medical mycology. PHSPublication No. 994, U.S. Government Printing Office, Washington, D.C.
4. Murray, Baron, Jorgensen, Landry and Pfaller (ed.). 2007. Manual of clinical microbiology, 9th ed. American Society for Microbiology, Washington, D.C.
5. U.S. Food and Drug Administration. Bacteriological analytical manual, online. AOAC International, Gaithersburg, Md. <www.cfsan.fda.gov/~ebam/bam-toc.html>