

Sabouraud Dextrose Agar

Catalog : HB0235-19

Sabouraud Dextrose Agar is used for the isolation, differentiation and maintainance of fungi.

Approximate Formula:

Ingredients	gm./liter
Mycological Peptone	10.0
Glucose	40.00
Agar	15.00
Final pH 5.6±0.2 at 25 °C	

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

Directions:

Suspend 65.0g of the medium in one liter of distilled or deionized water. Mix well and heat with frequent agitation to completely dissolve the powder. Dispense and sterilize in an autoclave at 121°C (15 lbs) for 15 minutes.

Principle and Interpretation:

Sabouraud Dextrose Agar Medium is used for the cultivation of yeasts, moulds and aciduric bacteria from pharmaceutical products in accordance with U.S. Pharmacopoeia. This medium is also employed in microbial limit tests in pharmaceutical testing, food, cosmetics, and clinical specimens.

Mycological Peptone provides nitrogenous compounds. Dextrose provides an energy source. High dextrose concentration and low pH favors fungal growth and inhibits contaminating bacteria from clinical specimens. For heavily contaminated samples, the plate must be supplemented with inhibitory agents for inhibiting bacterial growth.

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 Dextrose Agar 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

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>