Sabouraud Dextrose Agar Slant

Intended Use
Sabouraud Dextrose Agar slant is a general-purpose media used for isolation and cultivation of Yeasts, Moulds and Aciduric bacteria.

Summary
Sabouraud Dextrose Agar is Carlier's modification of the formulation described by Sabouraud for the cultivation of fungi, particularly those associated with skin infections. It is used in qualitative procedures for cultivation of pathogenic and non-pathogenic fungi, particularly dermatophytes. Carlier showed that this medium gives reliable results with *Microsporum audouinii, M. canis, Trichophyton mentagrophytes, T. flavum, T. rubrum* and *Candida albicans*. The fungi maintain their typical cultural appearance and thus may be readily identified according to the standard macroscopic characters described by Sabouraud. Sabouraud Dextrose Agar is recommended by the USP/EP/JP in Microbial Limit Tests for performing total yeast and mould count and is included in the Bacteriological Analytical Manual for food testing. It is also recommended by APHA for the examination of foods.
Sabouraud Dextrose Agar can be made inhibitory to most pathogenic fungi and bacteria by the addition of antibiotics. Gentamycin is an amino glycoside that inhibits the growth of Gram-negative bacteria. Chloramphenicol is inhibitory to a wide range of Gram-positive and Gram-negative bacteria; Cycloheximide is an antifungal agent that inhibits saprophytic fungi while allowing the growth of yeasts or dermatophytes. George *et al.,* aseptically added 0.5 g cycloheximide, 20000 units penicillin and 40000 units streptomycin to each liter of autoclaved, cooled medium. *Cryptococcus neoformans, Aspergillus fumigatus* and *Allescheria boydii* were found to be sensitive to cycloheximide; *Actinomyces bovis* and *Nocardia asteroids* were sensitive to penicillin and streptomycin. Hantshke used colistin, novobiocin and cycloheximide to isolate *Candida albicans*. Dolan used Gentamycin, Chloramphenicol and Cycloheximide for the selective isolation of pathogenic fungi.

Principle
Mixture of peptone and tryptone provides nitrogenous compounds, carbon and other growth factors. Dextrose is the carbohydrate source. The low pH of approximately 5.6 is favorable for the growth of fungi, especially dermatophytes and is slightly inhibitory to contaminating bacteria. Various antibiotics can be added to this medium for bacterial inhibition as well as to make it selective for the isolation of pathogenic fungi from material containing large number of other fungi or bacteria.

Formula*

Ingredients	**g/L**
Dextrose	40.0
Mixture of Peptic Digest of Animal Tissue and Pancreatic Digest of Casein (1:1)	10.0
Agar	15.0
Final pH (at 25°C)	5.6 ± 0.2

*Adjusted to suit performance parameters.

Directions
1. Bring the Sabouraud Dextrose Agar slant to the room temperature 22°C-30°C.
2. Use Sabouraud Dextrose Agar slant as per required application.

Quality Control
Appearance: Light amber coloured, Smooth slant.
Cultural Response: Cultural characteristics observed after an incubation at 20 °C – 25 °C for ≤ 5 Days.

Organism (ATCC)	**Growth**
Candida albicans 3147 (10231)	Good
Aspergillus brasiliensis WLRI 034(120) (16404)	Good

Storage and Stability
1. Store the ready to use Sabouraud Dextrose Agar slant at 15°C-25°C in a cool, dry place away from light.
2. Stability of the kit is as per expiry date mentioned on the label.

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. Carlier G. I. M., 1948, Brit. J. Derm. Syph., 60:61.
2. Sabouraud K., 1892, Ann. Dermatol. Syphilol, 3:1061
3. The United States Pharmacopoeia, 2011, The United States Pharmacopoeial Convention. Rockville, MD.
4. European Pharmacopoeia, 2011, European Dept. for the quality of Medicines.
5. Japanese Pharmacopoeia, 2008.
6. British Pharmacopoeia, 2011, The Stationery office British Pharmacopoeia.
7. Bacteriological Analytical Manual, 8th Edition, Revision A, 1998. AOAC, Washington D.C.
8. Murray PR, Baren EJ, Jorgensen JH, Pfaller MA, Yolken RH (editors) 2003, Manual of Clinical, Microbiology, 8th ed., ASM, Washington, D.C.
9. Data on file: Microxpress®, A Division of Tulip Diagnostics (P) Ltd.

Product Presentation:

Cat No.	Product description	Pack Size
203190510012	Ready Prepared Slant	12 Slants