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TECHNICAL INFORMATION

Catalog Number: 1009017 Saboraud dextrose agar

For the isolation, differentiation and maintainance of fungi.

Sabouraud Dextrose Agar is recommended for the cultivation and maintainance of fungi. It is a medium which has been widely used for the isolation of fungi and in general purpose work in mycology.

		Approximate formula in g/I:	
	10		40
Polipeptone		Dextrose	
	15		
Agar			

Final pH 5.6 <u>+</u> 0.2

PREPARATION:

Suspend 65 g of the medium in one liter of distilled or deionized water. Mix well to obtain an even uniform suspension. Heat with frequent agitation and boil for one minute. Dispense and sterilize at 118 - 121°C (no more than 15 lbs. of pressure) for 15 minutes.

USES:

Sabouraud Dextrose Agar can be used for the isolation, identification and maintainance of pathogenic and saprophytic fungi.

When the materials in study are highly contaminated, the isolation can be improved by adding a selective antimicrobial package. georg and collaborators recommended aseptically adding 0.5 mg of cycloheximide, 20 units of penicillin, and 40 mg of streptomycin per ml of medium, minutes before using, for the inhibition of contaminating flora which can obstruct the growth of fungal cultures.

To diminish the growth of other microorganisms several inhibitors such as tellurite, bile salts, and dyes can be incorporated into the medium.

The incubation of the plates should be at 25 to 35°C. The addition of 0.1 g of triphenyl tetrazolium chloride (TTC) for each 100 ml of medium greatly facilitates the identification of different species of the genus Candida because these yeasts yield colonies of different colors such as whites, roses, reds, and violets. One can obtain a very rich Sabouraud medium by dissolving the medium in one liter of Brain Heart Infusion. If desired, antimicrobial agents can be added to this enriched combination of media.

MICROBIOLOGICAL TEST:

The following typical results were obtained in the performance of the medium from type cultures after incubation at a temperature of 30°C and observed after 3-7 days.

Organism

Aspergillus niger ATCC 16404

Candida albicans ATCC 26790

good to excellent

Growth

good to excellent

Lactobacillus casei ATCC 9595

Saccharomyces cerevisiae ATCC 9763

good to excellent

good to excellent

good to excellent

Bibliography:

- Sabouraud, Ann. Dermat and Syphilol (1892-3).
- Ch'in, Proc. Soc. Exp. Biol. Med., v. 38: 700 (1938).
- Emmons and Ashburn, Pub. Health Reports, v. 63: 1416 (1948).
- Emmons and Hollaender, Arch. Dermatol. Syphilol., v. 52: 257 (1945).
 Robinson and Kotcher, Pub. Health Reports, v. 66: 1533 (1951).
 Kotcher, Robinson, and Miller, J. Bact., v. 62: 613 (1951).

- Serowy and Jung, *Derm. Wschr.*, v. 124: 665 (1951).
 Diagnostic Procedures, APHA, 4th Ed., 175 (1963).
- Frank, Arch. Dermatol. Syphilol., v. 26: 451 (1932).
- Davidson, Dawdling, and Buller, Can. J. Research, v. 6: 1 (1932).
- Davidson and Dawding, Arch. Dermatol. Syphilol., v. 26: 660 (1932).
- Serowy and Jung, Derm. Wschr., v. 124: 665 (1951).
- Chapman, Trans. New York Acad. Sci. Series II., v. 14: 254 (1952).
- Georg, J. Lab. Clin. Med., v. 67:355 (1953).

Availability:

Catalog #1009117, Saboraud Dextrose Agar, 500 g