Technical Data

HiEncap™ Sabouraud Dextrose Broth (HiEncap™ Sabouraud Liquid Medium) EC033D

HiEncap™ Sabouraud Dextrose Broth (Sabouraud Liquid Medium) is used for cultivation of yeasts, moulds and aciduric microorganisms.

Composition**

Ingredients	Gms / Litre
Dextrose	20.000
Peptone, special	10.000
Final pH (at 25°C)	5.6±0.2

**Formula adjusted, standardized to suit performance parameters

Directions

Each capsule contains 15 grams of media. Suspend 1 capsule in 500 ml (2 capsules in 1000 ml) distilled or purified water. Heat to boiling to dissolve the medium completely. Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes. Mix well and dispense as desired.

Principle And Interpretation

Sabouraud Dextrose Agar is Carliers modifications (1) of the formulation described by Sabouraud (2) for the cultivation of fungi, particularly those associated with skin infections. The medium is also recommended by APHA (3). Sabouraud Dextrose Broth is also a modification by Sabouraud (4) and serves the same purpose as Sabouraud Dextrose Agar.

Sabouraud dextrose media are peptone media supplemented with dextrose to support the growth of fungi. Peptone special provides nitrogen, vitamins, minerals, amino acids and growth factors. Dextrose provides an energy source for the growth of microorganisms. The low pH favours fungal growth and inhibits contaminating bacteria from clinical specimens (5). The acid reaction of the final medium is inhibitory to a large number of bacteria making it particularly useful for cultivating fungi and aciduric microorganisms. For isolation of fungi from contaminated specimens, a selective medium should be inoculated simultaneously. Incubate cultures for 4 to 6 weeks before reporting as negative.

Quality Control

Appearance
Gelatin capsule containing cream to yellow coloured granular media

Colour and Clarity of prepared medium
Light amber coloured clear solution in tubes

Quantity
Each capsule contains 15 grams of medium sufficient for 500 ml media

Reaction
pH of 3.0% w/v aqueous solution at 25°C. pH : 5.6±0.2

pH
5.40-5.80

Cultural Response
Cultural characteristics was observed after an incubation at 20-25°C for 3-5 days.

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EC033D: Cultural characteristics observed after incubation at 20-25 °C for 3-5 days.

Organism	Inoculum (CFU)	Growth	Incubation temperature	Incubation period
Cultural Response				
Candida albicans ATCC 10231	50 -100	luxuriant	20 -25 °C	<=5 d

**Aspergillus brasiliensis ATCC 16404*	50 -100	luxuriant	20 -25 °C	<=5 d
Saccharomyces cerevisiae ATCC 9763	50 -100	luxuriant	20 -25 °C	3 -5 d
Saccharomyces cerevisiae ATCC 2601	50 -100	good-luxuriant	20 -25 °C	3 -5 d
Candida albicans ATCC 2091	50 -100	luxuriant	20 -25 °C	3 -5 d
Escherichia coli ATCC 8739	50 -100	Luxuriant (inhibited on media with low pH)	20 -25 °C	<=5 d
Escherichia coli ATCC 25922	50 -100	good-luxuriant	20 -25 °C	3 -5 d
Escherichia coli NCTC 9002	50 -100	Luxuriant (inhibited on media with low pH)	20 -25 °C	3 -5 d
Lactobacillus casei ATCC 334	50 -100	luxuriant	20 -25 °C	3 -5 d

Storage and Shelf Life

Store below 30°C in a tightly closed container and the prepared medium at 2 - 8°C.Use before expiry date on the label.

Reference

1. Carlier G. I. M., 1984, Brit. J. Derm. Syph., 60:61
2. Sabouraud R., 1892, Ann. Dermatol. Syphil. 3 : 1061.
3. Downes F. P. and Ito K., (Eds.), 2001, Compendium of Methods for the Microbiological Examination of Foods, 4th Ed., APHA, Washington, D.C.
4. Sabouraud R., Les Teignes, Paris: Masson et Cie, 1910, p 553
5. Murray P. R., Baron J. H., Pfaller M. A., Jorgensen J. H. and Yolken R. H., (Ed.), 2003, Manual of Clinical Microbiology, 8th Ed., American Society for Microbiology, Washington, D.C.

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