

Sabouraud Dextrose HiVeg[®] Broth (Sabouraud Liquid HiVeg[®] Medium)

MV033

Intended Use:

Recommended for cultivation of yeasts, moulds and aciduric microorganisms.

Composition**

Ingredients	g / L
Dextrose (Glucose)	20.000
HiVeg TM special peptone	10.000
Final pH (at 25°C)	5.6±0.2

**Formula adjusted, standardized to suit performance parameters

Directions

Suspend 30.0 grams in 1000 ml purified / distilled water. Heat if necessary to dissolve the medium completely. Dispense into tubes or flasks as desired. Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes.

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 Medium (3). Sabouraud Dextrose HiVeg[®] Broth is same as Sabouraud Dextrose Broth except that the animal based peptones are completely replaced with vegetable peptones to avoid BSE/TSE risks associated with animal peptones. Sabouraud dextrose media are peptone media supplemented with dextrose to support the growth of fungi. HiVeg[®] special peptone provides carbon and nitrogen source, vitamins, minerals, amino acids and growth factors. Dextrose provides an energy source for the growth of microorganisms. The low pH favors fungal growth and inhibits contaminating bacteria from 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.

Type of specimen

Pharmaceutical samples.

Specimen Collection and Handling

For food and dairy samples, follow appropriate techniques for sample collection and processing as per guidelines (3,6).

After use, contaminated materials must be sterilized by autoclaving before discarding.

Warning and Precautions

Read the label before opening the container. Wear protective gloves/protective clothing/eye protection/face protection. Follow good microbiological lab practices while handling specimens and culture. Standard precautions as per established guidelines should be followed while handling specimens. Safety guidelines may be referred in individual safety data sheets.

Limitations

1. Since it is a general purpose medium, bacterial cultures will also grow .
2. Further isolation and biochemical tests should be carried out for confirmation.

Performance and Evaluation

Performance of the medium is expected when used as per the direction on the label within the expiry period when stored at recommended temperature.

Quality Control

Appearance

Cream to yellow homogeneous free flowing powder

Colour and Clarity of prepared medium

Light amber coloured clear solution in tubes

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.

Organism	Inoculum (CFU)	Growth
<i>Candida albicans</i> ATCC 10231 (00054*)	50 -100	luxuriant
<i>Candida albicans</i> ATCC 2091 (00055*)	50 -100	luxuriant
** <i>Aspergillus brasiliensis</i> ATCC 16404 (00053*)	50 -100	luxuriant
<i>Saccharomyces cerevisiae</i> ATCC 9763 (00058*)	50 -100	luxuriant
<i>Saccharomyces cerevisiae</i> ATCC 2601	50 -100	good-luxuriant
<i>Escherichia coli</i> ATCC 8739(00012*)	50 -100	Luxuriant (inhibited on media with low pH)
<i>Escherichia coli</i> ATCC 25922 (00013*)	50 -100	good-luxuriant
\$ <i>Lactobacillus paracasei</i> ATCC 334	50 -100	luxuriant

Key : *Corresponding WDCM numbers

(**) Formerly known as *Aspergillus niger* (\$) Formerly known as *Lactobacillus casei*.

Storage and Shelf Life

Store between 10-30°C in a tightly closed container and the prepared medium at 15-25°C. Use before expiry date on the label. On opening, product should be properly stored dry, after tightly capping the bottle in order to prevent lump formation due to the hygroscopic nature of the product. Improper storage of the product may lead to lump formation. Store in dry ventilated area protected from extremes of temperature and sources of ignition Seal the container tightly after use. Product performance is best if used within stated expiry period.

Disposal

User must ensure safe disposal by autoclaving and/or incineration of used or unusable preparations of this product. Follow established laboratory procedures in disposing of infectious materials and material that comes into contact with sample must be decontaminated and disposed of in accordance with current laboratory techniques (7,8)

Reference

1. Carlier G. I. M., 1984, Brit. J. Derm. Syph., 60:61
2. Sabouraud R., Les Teignes, Paris: Masson et Cie, 1910, p 553
3. Salfinger Y., and Tortorello M.L., 2015, Compendium of Methods for the Microbiological Examination of Foods, 5th Ed., American Public Health Association, Washington, D.C.
4. Sabouraud R., 1892, Ann. Dermatol. Syphil. 3 : 1061.
5. Murray P. R., Baron J. H., Pfaller M. A., Jorgensen J. H. and Tenover F. C., (Ed.), 2003, Manual of Clinical Microbiology, 8th Ed., American Society for Microbiology, Washington, D.C.
6. American Public Health Association, Standard Methods for the Examination of Dairy Products, 1978, 14th Ed., Washington D.C.
7. Isenberg, H.D. Clinical Microbiology Procedures Handbook. 2nd Edition.
8. Jorgensen, J.H., Pfaller, M.A., Carroll, K.C., Funke, G., Landry, M.L., Richter, S.S and Warnock., D.W. (2015) Manual of Clinical Microbiology, 11th Edition. Vol. 1.

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