Sabouraud Dextrose HiVeg™ Agar Base, Modified

MV286

Intended Use:

Recommended for selective cultivation of pathogenic fungi.

Composition**

Ingredients	Gms / Litre
Dextrose (Glucose)	20.000
HiVeg™ special peptone	10.000
Agar	17.000
Final pH (at 25°C)	7.0±0.2

**Formula adjusted, standardized to suit performance parameters

Directions

Suspend 23.5 grams in 500 ml purified / distilled water. Heat to boiling to dissolve the medium completely. Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes. Cool to 45-50°C and aseptically add the rehydrated contents of 1 vial of CC Supplement (FD035). Mix well before pouring in sterile Petri plates.

Note : Avoid undue exposure to heat which encourages hydrolysis of components.

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. Sabouraud Dextrose HiVeg™ Agar Base, Modified is the modification of Sabouraud medium (2) as described by Emmons (3). It has reduced dextrose content and a neutral pH (4). Though the low pH of this medium is favorable for the growth of fungi especially dermatophytes, some fungi are inhibited (3,5). Emmons modified the original formulation by adjusting the pH close to neutral to increase the recovery of fungi and by reducing the dextrose content from 40 to 20 g/l (6). Sabouraud Dextrose HiVeg™ Agar Base, Modified is prepared by using vegetable peptones in place of animal based peptones which make the media free of BSE/TSE risks. HiVeg™ special peptone is the source of nitrogenous growth factors. Dextrose provides as an energy source. The addition of antibiotics increases the selectivity of the medium. (3, 6) Chloramphenicol is inhibitory to a wide range of gram negative and gram positive bacteria, and cycloheximide is an antifungal agent that is active against saprophytic fungi and does not inhibit yeast or dermatophytes (7).

Type of specimen

Please add specimens

Specimen Collection and Handling

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. The medium does not support the growth of all fungal cultures as it is highly selective.
2. Further biochemical tests must 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

Gelling

Firm, comparable with 1.7% agar gel.

Colour and Clarity of prepared medium

Light amber coloured clear to slightly opalescent gel forms in Petri plates

Reaction

Reaction of 4.7% w/v aqueous solution at 25°C. pH : 7.0±0.2

pH

6.80-7.20

Cultural Response

Cultural characteristics observed with added CC Supplement, Modified (FD035) after an incubation at 25-30°C for 2-3 weeks.

Organism	Inoculum (CFU)	Growth w/ CC supplement	Recovery
#*Aspergillus brasiliensis* ATCC 16404 (00053*)	50-100	none - poor	
Candida albicans ATCC 10231 (00054*)	50-100	none-poor	<=10%
Escherichia coli ATCC 25922 (00013*)	>=10^4	inhibited	0%
Saccharomyces cerevisiae ATCC 9763 (00058*)	50-100	none-poor	<=10%
Trichophyton rubrum ATCC 28191	50-100	luxuriant	
Trichophyton mentagrophytes ATCC 9533	50-100	luxuriant	

Key : (*) - Corresponding WDCM numbers.
(#) - Formerly known as *Aspergillus niger*

Storage and Shelf Life

Store between 10-30°C in a tightly closed container and the prepared medium at 2-8°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 (8,9).

Reference

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