Littman Bile Broth Base

M663

Intended Use:

Used for selective enrichment and cultivation of pathogenic fungi.

Composition**

Ingredients	g / L
Peptone	10.000
Dextrose (Glucose)	10.000
Bile #	15.000
Crystal violet	0.010
Final pH (at 25°C)	7.0±0.2

**Formula adjusted, standardized to suit performance parameters
#Equivalent to Oxgall

Directions

Suspend 35.01 grams in 1000 ml purified/distilled water. Heat, if necessary, 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 sterile Streptomycin to a final concentration of 30 mcg/ml of medium. Mix well and dispense into sterile tubes or flasks as desired.

Principle And Interpretation

Littman Oxgall Broth Base was formulated by Littman (1,2). Littman Bile Broth Base is used for selective enrichment of pathogenic skin fungi (dermatophytes) and saprophytic fungi from various clinical specimens. It provides effective enrichment even when the test samples are heavily contaminated with bacterial flora. Littman Bile media are also used for the enumeration of fungal populations of air, soil, foodstuffs and other materials of sanitary significance (3). Crystal violet and Streptomycin has inhibitory effect on most of the bacteria. Bile restricts spreading of fungal colonies. The neutral pH favours the growth of many pathogenic fungi.

For inoculation, skin or nail scraping or infected hair is directly placed on the surface of Littman Bile Agar Base (M373) while sputum, faeces etc. are spread over the surface with sterile swab or the specimen are first enriched in broth and then cultured on agar medium. Whenever *Nocardia asteroides, Streptomyces* or any Streptomycin sensitive microorganisms are to be cultured, use the medium without Streptomycin (3).

Type of specimen

Clinical samples - skin or nail scraping or infected hair etc

Specimen Collection and Handling:

For clinical samples follow appropriate techniques for handling specimens as per established guidelines (4,5).
After use, contaminated materials must be sterilized by autoclaving before discarding.

Warning and Precautions

In Vitro diagnostic Use. For professional use only. 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 clinical specimens. Safety guidelines may be referred in individual safety data sheets.

Limitations:

1. Some organisms may show poor growth due nutritional variations.
2. Further biochemical and serological 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

Colour and Clarity of prepared medium

Blue coloured clear solution in tubes

Reaction

Reaction of 3.5% w/v aqueous solution at 25°C. pH : 7.0±0.2

pH

6.80-7.20

Cultural Response

Cultural characteristics observed with added sterile Streptomycin to a final concentration of 30mcg/ml of medium, after an incubation at 25-30°C for 48-72 hours .

Organism	Growth (Plain medium)	Growth with Streptomycin
Aspergillus flavus ATCC 22547	luxuriant	good-luxuriant
Candida albicans ATCC 10231 (00054*)	good - luxuriant	good - luxuriant
Escherichia coli ATCC 25922 (00013*)	good - luxuriant	inhibited
Microsporum audouinii ATCC 9079	luxuriant	good-luxuriant
Saccharomyces cerevisiae ATCC 9763 (00058*)	good - luxuriant	good - luxuriant
Saccharomyces uvarum ATCC 28098	good - luxuriant	good - luxuriant
Trichophyton mentagrophytes ATCC 9533	good	good

Key : * - Corresponding WDCM numbers.

Storage and Shelf Life

Store between 10-30°C in a tightly closed container and the prepared medium at 15-30°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 clinical sample must be decontaminated and disposed of in accordance with current laboratory techniques (4,5).

Reference

1.Littman M. L., 1947, Science, 106:109.
2.Littman M. L., 1948, Am. J. Clin. pathol., 18:409.
3.MacFaddin J. F., 1985, Media for Isolation-Cultivation-Identification-Maintenance of Medical Bacteria, Vol.1, Williams and Wilkins, Baltimore.
4.Isenberg, H.D. Clinical Microbiology Procedures Handbook 2nd Edition.
5.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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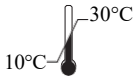
	HiMedia Laboratories Pvt. Limited, Plot No.C-40, Road No.21Y, MIDC, Wagle Industrial Area, Thane (W) -400604, MS, India	IVD	***In vitro* diagnostic medical device**		**Storage temperature**
EC REP	CEpartner4U, Esdoornlaan 13, 3951DB Maarn, NL www.cepartner4u.eu	CE	**CE Marking**		**Do not use if package is damaged**

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