Bile Salt Agar

M739

Intended Use:

Recommended for isolation and enumeration of bile tolerant enteric bacilli from clinical and non-clinical samples.

Composition**

Ingredients	g / L
Peptone	10.000
HM extract #	5.000
Sodium chloride	5.000
Sodium taurocholate	5.000
Agar	18.000
Final pH (at 25°C)	8.2±0.2

**Formula adjusted, standardized to suit performance parameters
Equivalent to Meat extract

Directions

Suspend 43.0 grams in 1000 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. Mix well and pour into sterile petri plates.

Principle And Interpretation

Bile Salt Agar is used for isolation and enumeration of enteric bacilli. Enteric bacilli include a variety of gram-negative bacilli, frequent inhabitant of the intestine as normal commensals or pathogens. They are mostly members of the *Enterobacteriaceae* family but members of other taxonomical groups (e.g.*Vibrionaceae*) are also considered in this category. These organisms can cause either intestinal or extra-intestinal infections (1).

The medium contains peptone and HM extract which provide nitrogenous compounds and other essential nutrients for the growth of enteric bacilli. Sodium taurocholate inhibits contaminating gram-positive organisms. Sodium chloride maintains the osmotic balance of the medium.

Type of specimen

Clinical samples - Urine, faeces samples.

Specimen Collection and Handling:

For clinical samples follow appropriate techniques for handling specimens as per established guidelines (2,3).
After use, contaminated materials must be sterilized by autoclaving before discarding.

Warning and Precautions :

In Vitro diagnostic Use only. 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. Further biochemical and serological tests must be carried out for further identification.

Performance and Evaluation

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

Quality Control

Appearance
Cream to yellow homogeneous free flowing powder
Gelling
Firm, comparable with 1.8% Agar gel
Colour and Clarity of prepared medium
Light amber coloured, clear to slightly opalescent gel forms in Petri plates.

Reaction

Reaction of 4.3% w/v aqueous solution at 25°C. pH : 8.2±0.2

pH

8.00-8.40

Cultural Response

Cultural characteristics observed after an incubation at 35-37°C for 18-24 hours.

Organism	Inoculum (CFU)	Growth	Recovery
# *Klebsiella aerogenes* ATCC 13048 (00175*)	50-100	luxuriant	>=50%
Escherichia coli ATCC 25922 (00013*)	50-100	luxuriant	>=50%
Staphylococcus aureus subsp. aureus ATCC 25923 (00034*)	>=10^4	inhibited	0%
Salmonella Typhi ATCC 6539	50-100	luxuriant	>=50%
Viibrio cholerae ATCC 15748	50-100	luxuriant	>=50%

Key : (*) Corresponding WDCM numbers. (#)
Formerly known as *Enterobacter aerogenes*

Storage and Shelf Life

Store between 10-30°C in a tightly closed container and the prepared medium at 20-30°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 (2,3).

Reference

1. Corry J. E. L., Curtis G. D. W., and Baird R. M., Culture Media for Food Microbiology, Vol. 34, Progress in Industrial Microbiology, 1995, Elsevier, Amsterdam

2. Isenberg, H.D. Clinical Microbiology Procedures Handbook 2nd Edition.

3. 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

30°C 10°C Storage temperature

EC REP CEpartner4U, Esdoornlaan 13, 3951DB Maarn, NL www.cepartner4u.eu

CE CE Marking

Do not use if package is damaged