Horie Arabinose Ethyl Violet Broth

M924

Intended Use:

Recommended for enrichment of *Vibrio* species.

Composition**

Ingredients	g/ L
Peptone	5.000
HM peptone B #	3.000
Sodium chloride	30.000
Bromothymol blue	0.030
Ethyl violet	0.001
Arabinose	5.000
Final pH (at 25°C)	9.0±0.2

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

Directions

Suspend 43.03 grams in 1000 ml purified/distilled water. Heat if necessary to dissolve the medium completely. Dispense in tubes or flasks as desired. Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes.

Principle And Interpretation

Vibrio parahaemolyticus is frequently isolated from coastal waters and seafood in temperate zones throughout the world. *V.parahaemolyticus* cells are often injured during food processing. Such injured cells may not be fully recovered by plating on selective media. Therefore, enrichment should involve special media to ensure the optimum recovery of both injured and healthy cells. Horie Arabinose Ethyl Violet Broth (HAE, pH 9.0) was recommended for recovering *V.parahaemolyticus* from refrigerated and frozen oyster homogenates (1,2,3).

Peptone and HM peptone B in the medium are sources of carbon, nitrogen, vitamins and minerals. Sodium chloride at 3.0% concentration protects cold and heat injured cells against inactivation (4). Due to fermentation of arabinose, the medium turns yellow under acidic conditions. Bromothymol blue and ethyl violet are the pH indicators.

Type of specimen

Clinical samples: faeces; Food samples

Specimen Collection and Handling:

Food sample: Weigh 50 grams of seafood sample into a blender. Add 450 ml Phosphate Buffer Saline dilution water and blend for 1 minute at 8000 rpm. This constitutes the 1:10 dilution. Prepare further dilutions and inoculate in 10 ml of Horie Arabinose Ethyl Violet Broth for enrichment. Incubate the tubes overnight at 35°C and streak a loopful from the top of the broth tubes containing the highest dilution showing growth onto TCBS Agar (M189).

For clinical samples follow appropriate techniques for handling specimens as per established guidelines (5,6).

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. Individual organisms differ in their growth requirement and may show variable growth patterns on the medium.
2. Each lot of the medium has been tested for the organisms specified on the COA. It is recommended to users to validate the medium for any specific microorganism other than mentioned in the COA based on the user's unique requirement. Further recovery from this enriched broth onto selective media is required.
3. Biochemical characterization is carried out from pure isolates for complete identification.

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

Light yellow to greenish blue homogeneous free flowing powder

Colour and Clarity of prepared medium

Blue coloured, clear solution without any precipitate

Reaction

Reaction of 4.3% w/v aqueous solution at 25°C. pH : 9.0±0.2

pH

8.80-9.20

Cultural Response

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

Organism	Inoculum (CFU)	Growth	Colour of medium
Vibrio cholerae ATCC 15748	50-100	good-luxuriant	yellow
Vibrio parahaemolyticus ATCC 17802 (00037*)	50-100	good-luxuriant	yellow

Key : (*) Corresponding WDCM numbers.

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 inorder 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 (5,6).

Reference

1. Horie S., Saheki K., Kozima T., Nara M. and Sekine Y., 1964, Bull. Jpn. Soc. Sci. Fish, 30: 786.
2. 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.
3. Wong, H. 2003. Journal of Food and Drug Analysis Vol. 11. No. 2.p.79.
4. Beuchat L. R., 1977, Can.J. Microbiol., 23: 630.
5. Isenberg, H.D. Clinical Microbiology Procedures Handbook 2nd Edition.
6. 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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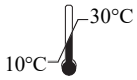
IVD ***In vitro*** **diagnostic medical device**



Storage temperature

EC REP CEpartner4U, Esdoornlaan 13,
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www.cepartner4u.eu

CE **CE Marking**

Do not use if package is damaged

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