Technical Data

Cetrimide HiVeg™ Broth

MV862

Intended Use:

Recommended for selective cultivation of *Pseudomonas aeruginosa* from various samples.

Composition**

Ingredients	g / L
HiVeg™ peptone	10.000
HiVeg™ extract	10.000
Sodium chloride	5.000
Cetrimide	0.300
Final pH (at 25°C)	7.2±0.2

**Formula adjusted, standardized to suit performance parameters

Directions

Suspend 25.3 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 15lbs pressure (121°C) for 15 minutes.

Principle And Interpretation

Pseudomonas aeruginosa grows well on all normal laboratory media. Cetrimide Broth Base is the modification of the formula designed by King, Ward and Raney (1) and is useful for the cultivation of *P. aeruginosa*. This medium is selective as it contains cetrimide (Cetyl trimethyl ammonium bromide), which inhibits other bacteria except *P.aeruginosa*. This medium is therefore, important in the identification of *P.aeruginosa*. Cetrimide Broth is used for the examination of cosmetics (2) and clinical specimens (3,4) for the presence of *P. aeruginosa*, as well as for evaluating the efficacy of disinfectants against this organism (5). Cetrimide HiVeg™ Broth is prepared by using vegetable peptones in place of animal based peptones which make the media free of BSE/ TSE risks. HiVeg™ peptone and HiVeg™ extract provide necessary nutrients for P.aeruginosa. Cetrimide acts as a quaternary ammonium, cationic detergent that causes release of nitrogen and phosphorus from bacterial cells other than Pseudomonas aeruginosa. Sodium chloride maintains osmotic equilibrium in the medium.

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. 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 the label within the expiry period when stored at recommended temperature.

Quality Control

Appearance

Cream to yellow coloured homogeneous free flowing powder

Colour and Clarity of prepared medium

Light amber coloured clear to slightly opalescent solution in tubes

Reaction

Reaction of 2.53% w/v aqueous solution at 25°C. pH : 7.2±0.2

pH

7.00-7.40

Cultural Response

Cultural characteristics observed after an incubation at 35-37°C for 24-48 hours.

Organism	Inoculum (CFU)	Growth
Escherichia coli ATCC 25922 (00013*)	>=10^4	inhibited
Pseudomonas aeruginosa ATCC 27853 (00025*)	50-100	luxuriant
Staphylococcus aureus subsp. *aureus* ATCC 25923 (00034*)	>=10^4	inhibited

Key : *Corresponding WDCM numbers.

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 (4,5).

Reference

1. King E.O., Ward M.K. and Raney D.E., 1954, J. Lab. Clin. Med., 44(2):301. 2. USFDA Bacteriological Analytical Manual, 2005, 18th Ed., AOAC, Washington, DC.
2. Forbes B. A., Sahm A. S. and Weissfeld D. F., Bailey & Scotts Diagnostic Microbiology, 10th Ed., 1998, Mosby, Inc., St. Louis, Mo.
3. Isenberg, H.D. Clinical Microbiology Procedures Handbook 2nd Edition.
4. 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.
5. Williams, (Ed.), 2005, Official Methods of Analysis of the Association of Official Analytical Chemists, 19th Ed., AOAC, Washington, D.C.

Revision : 02/2024