Technical Data

Gifu Anaerobic HiVeg™ Broth, Modified (GAM)

MV2079

Intended Use:

Recommended for the isolation and cultivation of anaerobic bacteria from clinical samples and susceptibility testing.

Composition**

Ingredients	g / L
HiVeg™ peptone	5.000
Soya peptone	3.000
HiVeg™ peptone No.3	5.000
Yeast extract	12.50
HiVeg™ extract	3.400
Dextrose (Glucose)	0.500
Potassium dihydrogen phosphate	2.500
Sodium chloride	3.000
Starch soluble	5.000
L-Cysteine hydrochloride	0.300
Sodium thioglycollate	0.300
L-Arginine	1.000
Vitamin K_1	0.005
Iron salt	0.010
L-Tryptophan	0.200
Final pH (at 25°C)	7.3±0.2

**Formula adjusted, standardized to suit performance parameters

Directions

Suspend 41.7 grams in 1000 ml of purified / distilled water. Heat if necessary to the dissolve the medium completely. Dispense into tubes or flasks as desired. Sterilize by autoclaving at 115°C for 15 minutes.

Principle And Interpretation

Gifu Anaerobic HiVeg™ Broth, Modified is a liquid medium for anaerobic bacteria. It is prepared by completely replacing animal based peptones by vegetable peptones to avoid BSE/TSE risks associated with animal peptones. As this medium contains combination of vegetable peptones, it is successfully used for cultivation of anaerobic organisms such as streptococci, pneumococci and meningococci. This medium is also suitable for blood culture (1). Anaerobic organisms require reducing condition and an absence of dissolved oxygen in the medium. Strict anaerobes obtain its energy and intermediates through oxidation utilizing hydrogen acceptors other than oxygen. Pre-reducing the medium by boiling to drive off the oxygen can expel this (2).

Sodium thioglycollate and L-Cysteine are the reducing agents added in this medium to provide adequate anaerobiosis. Anaerobic bacteria vary in their sensitivity to oxygen and nutritional requirements (3). HiVeg™ Peptone, HiVeg™ Peptone No.3, soya peptone, yeast extract and HiVeg™ extract provides nitrogen, carbon compounds, long chain amino acids, vitamin B complex and minerals for the growth of anaerobic organisms. Starch absorbs the toxic metabolites produced (4). Iron salt serves as essential growth factor and Sodium chloride maintains osmotic equilibrium (5).

Type of specimen

Clinical samples, Food samples

Specimen Collection and Handling

For clinical samples follow appropriate techniques for handling specimens as per established guidelines (2,6).

For food samples, follow appropriate techniques for sample collection and processing as per guidelines (7).

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. Further biochemical testing is required for pure cultures for complete identification.
2. This medium is recommended for susceptibility testing of pure cultures only.

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 brownish yellow homogeneous free flowing powder

Colour and Clarity of prepared medium
Amber coloured clear solution (may have slight precipitate) forms in tube

Reaction
Reaction of 4.2% w/v aqueous solution at 25°C. pH : 7.3±0.2

pH
7.10-7.50

Cultural Response
Cultural characteristics observed in an anaerobic atmosphere after an incubation at 35 - 37°C for 48 - 72 hours.

Organism	Inoculum (CFU)	Growth
Streptococcus pyogenes ATCC 19615	50-100	good - luxuriant
***Phocaeicola vulgatus* ATCC 8482	50-100	good - luxuriant
Clostridium sporogens ATCC 11437	50-100	good - luxuriant
Clostridium perfringens ATCC 13124 (00007*)	50-100	good - luxuriant

Key : (*) Corresponding WDCM numbers. ** Formerly known as *Bacteroides vulgatus*

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. Use before expiry date on the label. 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 (2,6).

Reference

1. Nissui Manual, Microbiological products Nissui Pharmaceutical Co., 1983.
2. Isenberg, H.D. Clinical Microbiology Procedures Handbook. 2nd Edition.
3. Collee J.G., Fraser A.G., Marminon B.P., Simmons A., (Eds), 1996, Mackie and McCartney. Practical Medical Microbiology, 14th Ed., Churchill Livingstone.
4. Ajello. G.W., Geely J.C., Hayes P.S.et al., 1984, J. clin Microbiol., 20:55-8.
5. Gibbons R.J., and MacDonald J.B., 1960, J. Bacteriol, 80:164-170.
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.
7. 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.

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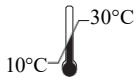
IVD ***In vitro* diagnostic medical device**



Storage temperature

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

CE Marking

Do not use if package is damaged

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