Technical Information

L.D. MiVeg Agar

Product Code : VM1742

Application:- L.D. MiVeg Agar is used for cultivation and identification of fastidious anaerobic bacteria.

Composition

Ingredients	Gms / Litre
MiVeg hydrolysate	5.0
Yeast extract	5.0
Sodium chloride	2.5
Sodium sulphite	0.1
L-Cystine	0.4
L-Tryptophan	0.2
Vitamin K1	0.01
Ferric pyrophosphate	0.01
Agar	20.0
Final pH (at 25°C)	7.4 ± 0.2

** Formula adjusted, standardized to suit performance parameters.

Principle & Interpretation

L.D. MiVeg Agar is prepared by adding MiVeg hydrolysate and Ferric pyrophosphate in place of Casein enzymic hydrolysate and Hemin respectively thus making the medium free from BSE/ TSE risk. L.D. MiVeg Agar is the modification of Lombard Dowell (L.D.) Agar which was developed by Lombard and Dowell (1) for cultivating fastidious anaerobic bacteria. This medium is used for the determination of degree of growth of fastidious anaerobic bacteria like *Bacteroides* and it can also be used to assess indole and catalase production of *Bacteroides* and *Fusobacterium* species.

MiVeg hydrolysate and yeast extract supplies essential nitrogenous nutrients while ferric pyrophosphate and Vitamin K1 supply additional growth factors. L-Cysteine and L-Tryptophan serves as the amino acid sources. Sodium sulphite act as an antioxidant. Sodium chloride maintains osmotic balance of the medium. Catalase-positive reaction may not be evident until 30 seconds to 1 minute after application of 3% hydrogen peroxide (2, 3).

Methodology

Suspend 33.22 grams of powder media in 1000 ml distilled water. Mix thoroughly and heat to boiling to dissolve the medium completely. Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes.

Quality Control

Physical Appearance

Yellow coloured, may have slightly greenish tinge,homogeneous, free flowing powder.

Gelling

Firm, comparable with 2.0% Agar gel.

Colour and Clarity of prepared medium

Medium amber coloured, clear to slightly opalescent gel forms in petri plates.

Reaction

Reaction of 3.32% w/v aqueous solution is pH 7.4 ± 0.2 at 25°C.

pH Range

7.2-7.6

Cultural Response/Characteristics

Cultural characteristics observed after an incubation at 35-37°C for 40 - 48 hours under anaerobic conditions.

Organisms (ATCC)	Inoculum (CFU)	Growth	Indole	Catalase
Bacteroides fragilis (25285)	10^2-10^3	good to luxuriant	_	+
Bacteroides corrodens	10^2-10^3	good to luxuriant	_	_
Fusobacterium necrophorum (25286)	10^2-10^3	good to luxuriant	+	_
Fusobacterium nucleatum (25586)	10^2-10^3	good to luxuriant	+	_

Storage and Shelf Life

Dried Media: Store below 30°C in tightly closed container and use before expiry date as mentioned on the label.
Prepared Media: 2-8^0 in sealable plastic bags for 2-5 day.

Further Reading

1. Dowell V. and Lombard G., June 1977, U.S., DHEW, Center for Disease Control (CDC), Atlanta, Ga.
2. Koneman E., Allen S., Dowell V. and Sommers H., 1979, Colour Atlas and Textbook of Diagnostic Microbiology, J.B. Lippincott Co., Philadelphia.
3. MacFaddin J.F., 1985, Media for Isolation-Cultivation-Identification-Maintenance of Medical Bacteria, Vol.I, Williams and Wilkins, Baltimore .

Disclaimer :

- User must ensure suitability of the product(s) in their application prior to use.
- The product conform solely to the technical information provided in this booklet and to the best of knowledge research and development work carried at **CDH** is true and accurate.
- **Central Drug House Pvt. Ltd.** reserves the right to make changes to specifications and information related to the products at any time.
- Products are not intended for human or animal diagnostic or therapeutic use but for laboratory, research or further manufacturing of diagnostic reagents extra.
- Statements contained herein should not be considered as a warranty of any kind, expressed or implied, and no liability is accepted for in fingement of any patents.Do not use the products if it fails to meet specificatons for identity and performens parameters.