

Technical Information

Vibrio MiVeg Agar

Product Code : VM1820

Application:- Vibrio MiVeg Agar is a selective medium used for selective cultivation of Vibrio species.

Composition**

Ingredients	Grams/Litre
Yeast extract	5.0
MiVeg hydrolysate	8.0
MiVeg peptone No. 3	3.0
Sucrose	20.0
Sodium thiosulphate, 5H ₂ O	6.5
Sodium citrate. 2H ₂ O	10.0
Synthetic detergent No. III	1.0
Sodium chloride	10.0
Synthetic detergent No. II	1.0
Sodium lauryl sulphate	0.2
China blue	0.2
Cresol red	0.2
Agar	15.0
Final pH (at 25°C)	8.5 ± 0.2

** Formula adjusted, standardized to suit performance parameters

Principle & Interpretation

Vibrio MiVeg Agar is prepared by adding vegetable peptones instead of animal based peptones thereby making the medium free of BSE/TSE risks. This medium is the modification of Vibrio Agar which is a selective medium for the isolation of *Vibrio cholerae*, *Vibrio parahaemolyticus* as well as other *Vibrios* (1).

MiVeg hydrolysate, MiVeg peptone No.3 and yeast extract supplies nitrogenous, carbonaceous compounds, sulphur, vitamin B complex and other essential growth nutrients. Sodium citrate, and synthetic detergents inhibit gram-positive organisms and coliforms. Sucrose serve as an fermentable carbohydrate while thiosulphate acts as a sulphur source. Alkalinity of this medium helps in recovery of *Vibrio cholerae*. China blue and cresol red are the pH indicators.

Methodology

Suspend 80.1 grams of powder media in 1000 ml distilled water. Mix thoroughly and heat to boiling to dissolve the medium completely. DO NOT AUTOCLAVE. Cool to 45 - 50°C and then pour into sterile petri plates.

Quality Control

Physical Appearance

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

Gelling

Firm, comparable with 1.5% Agar gel.

Colour and Clarity of prepared medium

Reddish purple coloured, clear to slightly opalescent gel forms in petri plates.

Reaction

Reaction of 8% w/v aqueous solution of the medium at 25°C pH 8.5 ± 0.2.

pH range

8.3-8.7

Cultural Response/Characteristics

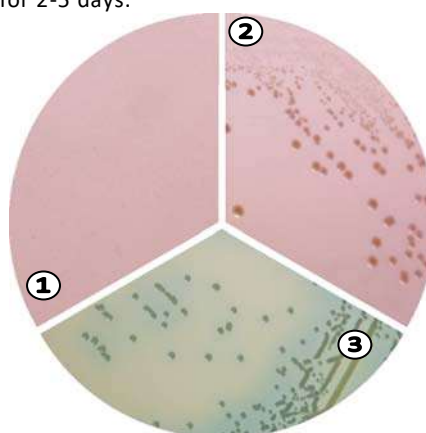
Cultural characteristics observed after an incubation at 35-37°C for 18-24 hours.

Organisms (ATCC)	Inoculum (CFU)	Growth	Recovery	Colour of Colony
<i>Enterococcus faecalis</i> (29212)	10 ² -10 ³	none-poor	<20%	Yellow
<i>Escherichia coli</i> (25922)	10 ² -10 ³	inhibited	0%	-
<i>Pseudomonas aeruginosa</i> (27853)	10 ² -10 ³	none-poor	<20%	Blue
<i>Salmonella</i> serotype Typhi (6539)	10 ² -10 ³	inhibited	0%	-
<i>Shigella flexneri</i> (12022)	10 ² -10 ³	inhibited	0%	-
<i>Vibrio cholerae</i> (15748)	10 ² -10 ³	good-luxuriant	>50%	Blue
<i>Vibrio parahaemolyticus</i> (17802)	10 ² -10 ³	good-luxuriant	>50%	Slightly reddish

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° in sealable plastic bags for 2-5 days.



VM1820 Vibrio MiVeg Agar

1. Control
2. *Vibrio parahaemolyticus*
3. *Vibrio cholerae*

Further Reading

1. Atlas, R.M. 1993, Handbook of Microbiological Media, Parks, L.C. (Ed.), CRC Press, Boca Raton

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 infringement of any patents. Do not use the products if it fails to meet specifications for identity and performance parameters