Dehydrated Culture Media
Bases / Media Supplements

Technical Information

Yersinia Isolation MiVeg Agar

Product Code : VM1564

Application:- Yersinia Isolation MiVeg Agar is recommended for the selective isolation of *Yersinia* species from foods.

Composition**

Ingredients	Gms / Litre
MiVeg peptone	15.0
MiVeg extract No. 1	8.5
Yeast extract	5.0
Lactose	10.0
Synthetic detergent No. III	2.0
Sodium citrate	10.0
Synthetic detergent No. II	3.0
Sodium thiosulphate	8.5
Ferric citrate	1.0
Calcium chloride	1.0
Neutral red	0.025
Brilliant green	0.0003
Agar	15.0
Final pH (at 25°C)	7.4 ± 0.2

** Formula adjusted, standardized to suit performance parameters.

Principle & Interpretation

Yersinia Isolation MiVeg Agar is prepared by adding vegetable peptone instead of animal based peptones thereby making the medium BSE/TSE risk free. This medium is the modification of Yersinia Isolation Agar, for selective isolation of *Yersinia* species and preliminary differentiation of *Yersinia enterocolitica* from human and animal intestinal contents (1). MiVeg peptone, MiVeg extract No.1 and yeast extract supplies nitrogenous and carbonaceous compounds, vitamin B complex, trace elements and certain other necessary growth nutrients. Neutral red is the pH indicator. Lactose is the fermentable carbohydrate. Synthetic detergent present in the medium inhibits *Enterobacteriaceae* but not *Yersinia enterocolitica*. Brilliant green and sodium citrate has an inhibitory action on the accompanying gram-positive bacteria. After 24 hours of incubation at 29-30°C *Yersinia enterocolitica* and some species of *Enterobacteriaceae* exhibit scanty growth. However, after 48 hours *Yersinia enterocolitica* colonies are well established and other *Yersinia* species start growing.

Methodology

Suspend 79 grams of powder media in 1000 ml distilled water. Mix thoroughly and heat to boiling to dissolve the medium completely. DO NOT AUTOCLAVE OR OVERHEAT.

Quality Control

Physical Appearance

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

Gelling

Firm, comparable with 1.5 % Agar gel.

Colour and Clarity of prepared medium

Orange red coloured, clear to slightly opalescent gel forms in petri plates.

Reaction

Reaction of 7.9% w/v aqueous solution is pH 7.4 ± 0.2 at 25°C

pH Range

7.2-7.6

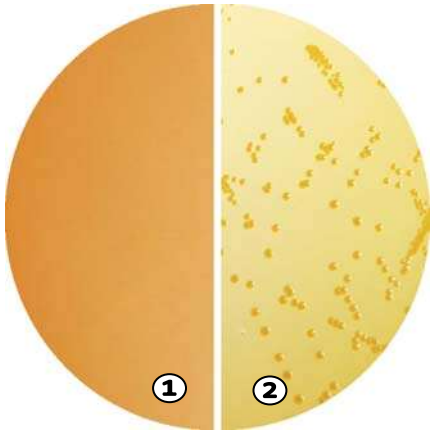
Cultural Response/Characteristics

Cultural characteristics observed after an incubation of 18-24 hours at 25-30°C .

Organisms (ATCC)	Inoculum (CFU)	Growth	Recovery
Escherichia coli (25922)	10^3	None-poor	<20%
Proteus mirabilis (25933)	10^3	Poor-good	>30%
Salmonella serotype Typhimurium (14028)	10^3	Poor-good	>30%
Shigella flexneri (12022)	10^3	None-poor	<20%
Yersinia enterocolitica (27729)	10^3	Good-luxuriant	>50%

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.



VM1564 Yersinia Isolation MiVeg Agar

1. Control
2. *Yersinia enterocolitica*

Further Reading

1. Wauters G., 1973, Med. Malad. Infect., 3:437.

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.
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