Dehydrated Culture Media
Bases / Media Supplements

Technical Information

Yersinia Selective MiVeg Agar Base

Product Code : VM1843

Application:- Yersinia Selective MiVeg Agar Base is recommended for the isolation and enumeration of *Yersinia enterocolitica* from clinical specimens and food.

Composition**

Ingredients	Gms / Litre
MiVeg special peptone	20.0
Yeast extract	2.0
Mannitol	20.0
Sodium pyruvate	2.0
Sodium chloride	1.0
Magnesium sulphate	0.01
Synthetic detergent No. III	0.5
Neutral red	0.03
Crystal violet	0.001
Agar	12.5
Final pH (at 25°C)	7.4 ± 0.2

** Formula adjusted, standardized to suit performance parameters.

Principle & Interpretation

Yersinia Selective MiVeg Agar Base is prepared by adding MiVeg special peptone in place of Peptone special thereby making the medium BSE/TSE risk free. This medium is modification of the formulation based on CIN Agar of Schiemann (1, 2). Yersinia Selective MiVeg Agar Base with added Yersinia Selective Supplement is used to isolate *Yersinia enterocolitica* from clinical and non-clinical specimens. This medium can be used to differentiate mannitol fermenters from non-fermenters. Synthetic detergent No.III and Crystal violet inhibits gram-positive and a number of gram-negative bacteria thereby imparts selectivity to the medium. Addition of antibiotic supplement makes it highly selective for *Yersinia*. Dark red coloured colonies of *Yersinia enterocolitica* appear on this medium resembling the bulls eye, which are normally surrounded by a transparent border. Colony size, smoothness and ratio of the border to centre diameter may vary among different serotypes. *Serratia liquefaciens*, *Citrobacter freundii* and *Enterobacter agglomerans* may resemble *Yersinia enterocolitica* which can be further identified by biochemical

Methodology

Suspend 29 grams of powder media in 500 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. Cool to 45-50°C and aseptically add reconstituted Yersinia Selective Supplement (MS2034). Mix well and pour into sterile petri plates.

Quality Control

Physical Appearance

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

Gelling

Firm, comparable with 1.25% w/v agar gel.

Colour and Clarity of prepared medium

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

Reaction

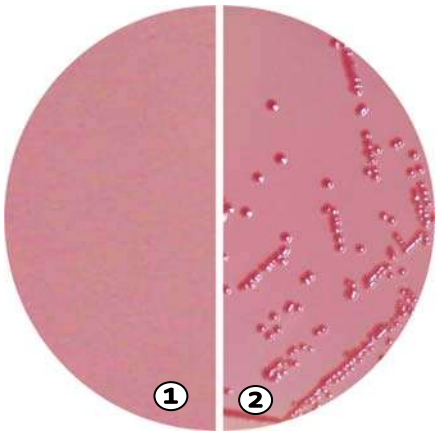
Reaction of 5.8% w/v aqueous solution is pH 7.4 ± 0.2 at 25°C.

pH Range
7.2-7.6
Cultural Response/Characteristics
Cultural characteristics observed after an incubation at 30-35°C for for 18-48 hours.

Organisms (ATCC)	Inoculum (CFU)	Growth	Recovery	Colony characteristics
Enterococcus faecalis (29212)	10^3	Inhibited	0%	-
Escherichia coli (25922)	10^3	Inhibited	0%	-
Proteus mirabilis (25933)	10^3	Inhibited	0%	-
Pseudomonas aeruginosa (27853)	10^3	Inhibited	0%	-
Yersinia enterocolitica (27729)	10^3	Good-luxuriant	>50%	Translucent with dark pink centre

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.



VM1843 Yersinia Selective MiVeg Agar Base
1. Control
2. *Yersinia enterocolitica*

Further Reading

1. Schiemann, 1979, Can. J. Microbiol., 25 : 1298.
2. Schiemann, 1980, Can. J. Microbiol., 26 : 1232.

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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