

Technical Information

China Blue Lactose MiVeg Agar

Product Code :VM1580

Application:- China Blue Lactose MiVeg Agar is a standard, non-inhibitory medium used for the differentiation and enumeration of bacteria in milk.

Composition

Ingredients	Gms / Litre			
MiVeg peptone	5.0			
MiVeg extract	3.0			
Lactose	10.0			
Sodium chloride	5.0			
China blue	0.3			
Agar	15.0			
Final pH (at 25°C)	7.0±0.2			

^{**} Formula adjusted, standardized to suit performance parameters.

Principle & Interpretation

China Blue Lactose MiVeg Agar is prepared by using MiVeg peptone and MiVeg extract instead of animal based peptones & Beef extract respectively thereby making the medium free from BSE/TSE risks. This media is the modification of China Blue Lactose Agar, which was first designed by Brandl and Sobeck-Skal (1). It is a standard, non-inhibitory medium used for the differentiation and enumeration of bacteria in milk. China blue act as a pH indicator which helps in differentiating lactose fermenters and lactose non-fermenters. However, this medium does not restrict the growth of cocci and hence can be used for the detection of *Streptococci* and *Staphylococci* as well. Agar plates of this medium can be either inoculated by streaking directly or by pour-plate technique. Decimally diluted milk can be added to the molten, cooled medium.

Methodology

Suspend 38.3 grams of powder media in 1000 ml distilled water. Mix thoroughly. Heat to boiling to dissolve the medium completely. Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes.

Quality Control

Physical Appearance

Greenish yellow coloured, homogeneous, free flowing powder.

Gelling

Firm, comparable with 1.5% Agar gel.

Colour and Clarity of prepared medium

Light blue coloured, slightly opalescent gel forms in petri plates.

Reaction

Reaction of 3.83 % w/v aqueous solution pH: 7.0 ±0.2 at 25°C

pH range

6.8-7.2

Cultural Response/Characteristics

Cultural characteristics observed after an incubation at 35-37°C for 22-24 hours

Organisms (ATCC)	Inoculum (CFU)	Growth	Recovery	Colour of colony
Enterococcus faecalis (29212)	10 ² -10 ³	luxuriant	>70%	blue
Escherichia coli (25922)	10 ² -10 ³	luxuriant	>70%	blue

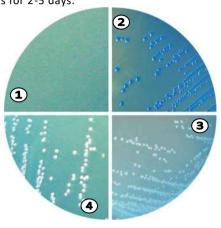




Proteus vulgaris (13315)	10 ² -10 ³	luxuriant	>70%	colourless
Salmonella serotype Typhi (6539)	10 ² -10 ³	luxuriant	>70%	colourless
Shigella flexneri (12022)	$10^2 - 10^3$	luxuriant	>70%	colourless
Staphylococcus aureus (25923)	$10^2 - 10^3$	luxuriant	>70%	colourless

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 days.



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- 1. Control
- 2. Escherichia coli
- 3. Enterococcus faecalis
- 4. Staphylococcus aureus

Further Reading

1. Brandl E. and Sobeck - Skal E., 1963, Milchwiss. Ber., 13:1.

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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