

China Blue Lactose HiVeg™ Agar**MV580**

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

Composition ** :

Ingredients	Grams/Litre
HiVeg peptone	5.0
HiVeg 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.

Directions :

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

Principle and Interpretation :

The medium is prepared by using HiVeg peptone and HiVeg extract which are free from BSE/TSE risks. China Blue Lactose HiVeg Agar 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 is 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. China Blue Lactose HiVeg Agar plates can be either streak inoculated directly or used for the pour-plate technique. Decimally diluted milk can be added to the molten, cooled medium.

Quality Control :**Appearance of powder**

Greenish yellow coloured, homogeneous, free flowing powder.

Gelling

Firm, comparable with 1.5% Agar gel.

Colour and Clarity

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

Reaction

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

Product Profile :

Vegetable based (Code MV)©	Animal based (Code M)
MV580 HiVeg peptone HiVeg extract	M580 Peptic digest of animal tissue Beef extract

Recommended for : Differentiation and enumeration of bacteria in milk.

Reconstitution : 38.3 g/l

Quantity on preparation (500g) : 13.05 L

pH (25°C) : 7.0 ± 0.2

Supplement : None

Sterilization : 121°C / 15 minutes.

Storage : Dry Medium - Below 30°C, Prepared Medium 2 - 8°C.

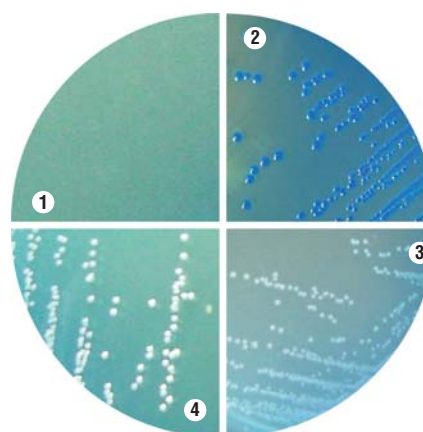
Cultural Response

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

Organisms (ATCC)	Inoculum (CFU)	Growth	Recovery	Colour of colony
<i>Enterococcus faecalis</i> (29212)	10 ² -10 ³	luxuriant	>70%	blue
<i>Escherichia coli</i> (25922)	10 ² -10 ³	luxuriant	>70%	blue
<i>Proteus vulgaris</i> (13315)	10 ² -10 ³	luxuriant	>70%	colourless
<i>Salmonella</i> serotype Typhi (6539)	10 ² -10 ³	luxuriant	>70%	colourless
<i>Shigella flexneri</i> (12022)	10 ² -10 ³	luxuriant	>70%	colourless
<i>Staphylococcus aureus</i> (25923)	10 ² -10 ³	luxuriant	>70%	colourless

References :

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

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- Control
- Escherichia coli*
- Enterococcus faecalis*
- Staphylococcus aureus*