

B.T.B. Lactose HiVeg™ Agar, Modified

MV1081

B.T.B. Lactose HiVeg Agar, Modified is recommended for differentiation of lactose fermenting and non-fermenting bacteria belonging to *Enterobacteriaceae*.

Composition ** :

Ingredients	Grams/Litre
HiVeg peptone	3.5
HiVeg hydrolysate	3.5
Sodium chloride	5.0
Lactose	15.5
Bromo thymol blue	0.04
Agar	13.0

Final pH (at 25°C) 7.0 ± 0.2

** Formula adjusted, standardized to suit performance parameters.

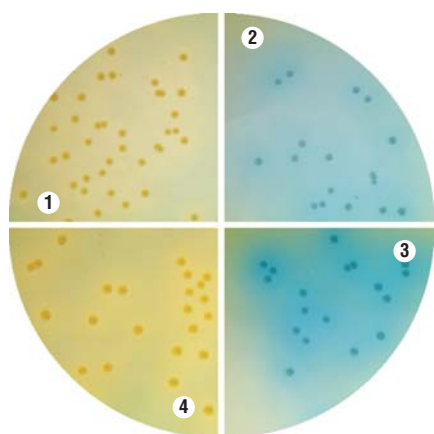
Directions :

Suspend 40.54 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 :

B.T.B. Lactose HiVeg Agar, Modified is free from BSE/TSE risks as it is prepared from HiVeg peptone and HiVeg hydrolysate. B.T.B. Lactose HiVeg Agar, Modified is the modification of Lactose Blue Agar which is used for differentiating lactose fermenting and non-fermenting bacteria belonging to the family *Enterobacteriaceae*.

HiVeg hydrolysate and HiVeg peptone provide essential nutrients for bacterial metabolism. Lactose provides a fermentable carbohydrate source for the enteric bacteria. Bromo thymol blue is a pH indicator for indicating the acid production due to carbohydrate fermentation. It turns yellow at acidic pH and imparts yellow colour to the colony. Alkalinization produces a blue colouration. Addition of 0.28 g/l metachrome yellow suppresses the swarming of *Proteus species* as recommended by Winkle(1) in the conventional medium.



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1. *Staphylococcus aureus*
2. *Salmonella* serotype Typhi
3. *Salmonella* serotype Enteritidis
4. *Escherichia coli*

Product Profile :

Vegetable based (Code MV)Ⓞ	Animal based (Code M)
MV1081 HiVeg peptone HiVeg hydrolysate	M1081 Peptic digest of animal tissue Casein enzymic hydrolysate

Recommended for : Differentiation of lactose fermenting and non-fermenting bacteria belonging to *Enterobacteriaceae*.

Reconstitution : 40.54 g/l

Quantity on preparation (500g): 12.33 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.

Quality Control :

Appearance of powder

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

Gelling

Firm, comparable with 1.3% Agar gel.

Colour and Clarity

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

Reaction

Reaction of 4.05% w/v aqueous solution is pH 7.0 ± 0.2 at 25°C

Cultural Response

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

Organisms (ATCC)	Inoculum (CFU)	Growth	Recovery	Colour of Colony
<i>Escherichia coli</i> (25922)	10 ² -10 ³	luxuriant	>70%	yellow, opaque colonies
<i>Salmonella</i> serotype Enteritidis (13076)	10 ² -10 ³	luxuriant	>70%	bluish colonies
<i>Salmonella</i> serotype Typhi (6539)	10 ² -10 ³	luxuriant	>70%	bluish colonies
<i>Staphylococcus aureus</i> (25923)	10 ² -10 ³	good-luxuriant	>70%	deep yellow

References :

1. Winkle S., 1947, Zbl. Bakt. I. Orig., 152:103.