

Fluid Lactose HiVeg™ Medium

MV026

Fluid Lactose HiVeg Medium is recommended as a pre-enrichment medium for the detection of coliform bacteria in water, dairy products and foods and for the study of lactose fermentation by common bacteria.

Composition ** :

Ingredients	Grams/Litre
HiVeg peptone No. 2	5.0
HiVeg extract	3.0
Lactose	5.0

Final pH (at 25°C) 6.9 ± 0.2

** Formula adjusted, standardized to suit performance parameters.

Directions :

Suspend 13 grams in 1000 ml distilled water. Mix well and distribute into tubes with inverted Durham's tubes. Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes. The concentration of medium is adjusted in accordance with sample size.

Principle and Interpretation :

Fluid Lactose HiVeg Medium is prepared by using HiVeg peptone No.2 and HiVeg extract which are free of BSE/TSE risks. Fluid Lactose HiVeg Medium is the modification of Fluid Lactose Medium formulated in accordance with the recommendations of APHA and can be used for testing water (1), dairy products (2) and foods (3).

HiVeg extract and HiVeg peptone No. 2 provide essential nutrients for bacterial metabolism. Lactose is the source of fermentable carbohydrate. Growth with gas formation is a presumptive test for coliforms. Whenever there is larger inocula, multiple strength lactose broth is used. The final concentration of the components is maintained at a constant level (13 g/lit).

After incubation at 35 ± 2°C for 24 ± 2 hours examine tubes for turbidity and for gas production in the Durham's tube. If no gas has been formed reincubate and observe after 48 ± 3 hours. Turbidity of the medium accompanied by formation of gas is a positive presumptive test for the presence of coliforms in the sample.

Quality Control :**Appearance of powder**

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

Colour and Clarity

Light amber coloured, clear solution without any precipitate.

Reaction

Reaction of 1.3% w/v aqueous solution is pH 6.9 ± 0.2 at 25°C.

Cultural Response

Cultural characteristics observed after an incubation at 35 - 37°C for 18 - 48 hours.

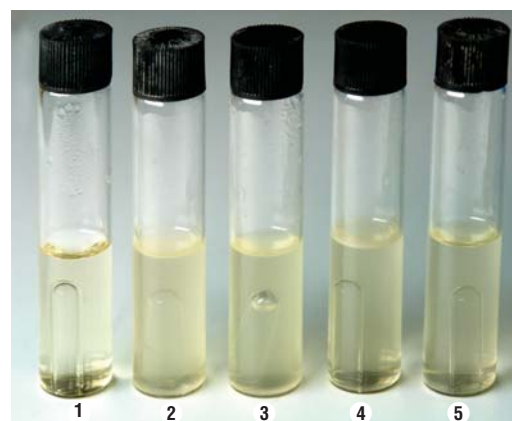
Organisms (ATCC)	Inoculum (CFU)	Growth	Gas
<i>Enterobacter aerogenes</i> (13048)	10 ² -10 ³	good-luxuriant	+
<i>Enterococcus faecalis</i> (29212)	10 ² -10 ³	good-luxuriant	-
<i>Escherichia coli</i> (25922)	10 ² -10 ³	good-luxuriant	+
<i>Pseudomonas aeruginosa</i> (27853)	10 ² -10 ³	good-luxuriant	-

Product Profile :

Vegetable based (Code MV)©	Animal based (Code M)
MV026 HiVeg peptone No.2 HiVeg extract	M026 Pancreatic digest of gelatin Beef extract
Recommended for	The detection of coliform bacteria in water, dairy products and foods and for the study of lactose fermentation by common bacteria.
Reconstitution	: 13.0 g/l
Quantity on preparation (500g)	: 38.46 L
	(100g) : 7.69 L
pH (25°C)	: 6.9 ± 0.2
Supplement	: None
Sterilization	: 121°C / 15 minutes.
Storage	: Dry Medium - Below 30°C, Prepared Medium 2 - 8°C.

References :

- Eaton A.D., Clesceri L.S. and Greenberg A.E., (Eds.), 2005, Standard Methods for the Examination of Water and Wastewater, 21st ed, APHA, Washington, DC.
- Standard Methods for the Examination of Dairy Products. 17th Edition, 2004 Edited by H. Michael Wehr and Joseph H.Frank.
- Downes FP and Ito K (Eds.), 2001, Compendium of Methods For The Microbiological Examination of Foods, 4th ed., APHA, Washington, D.C.

**MV026 Fluid Lactose HiVeg Medium**

- Control
- Enterobacter aerogenes*
- Escherichia coli*
- Pseudomonas aeruginosa*
- Enterococcus faecalis*