Drigalski Litmus Lactose HiVeg™ Agar MV659

Drigalski Litmus Lactose HiVeg Agar is used as a non-selective differential medium for the detection of enteric pathogens.

Composition ** :

Ingredients	Grams/Litre
HiVeg peptone	7.0
Sodium chloride	5.0
Lactose	15.0
Litmus	1.2
Agar	13.0

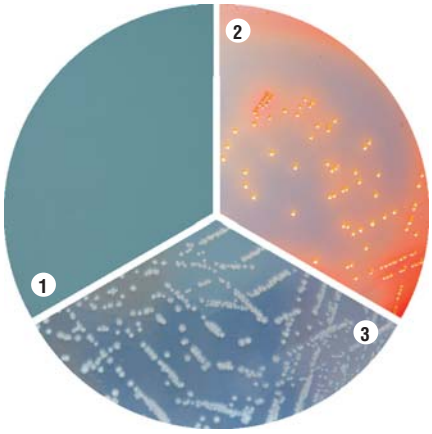
Final pH (at 25°C) 7.4 ± 0.2
** Formula adjusted, standardized to suit performance parameters.

Directions :

Suspend 41.2 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 :

This medium is prepared by using HiVeg peptone in place of Peptic digest of animal tissue, making the medium free from BSE/TSE risks. Drigalski Litmus Lactose HiVeg Agar is the modification of Drigalski Litmus Lactose Agar formulated as per Drigalski and Conrad (1) as a differential medium for the detection of enteric pathogens from water, meat, milk and other food materials.
The medium contains lactose as the source of carbon and fermentable carbohydrate. HiVeg peptone supplies essential nitrogenous nutrients to the microorganisms. Litmus is the pH indicator in the medium. Lactose fermenters produce acid and thus change the colour of litmus to red forming colonies. Lactose non-fermenters develope blue colonies on the medium. Inoculate culture from primary fermentation tubes showing gas either by four-quadrant streaking on the medium or by serial dilution and pour plate technique (2).



MV659 Drigalski Litmus Lactose HiVeg Agar
1. Control
2. *Escherichia coli*
3. *Salmonella* serotype Typhimurium

Product Profile :

Vegetable based (Code MV)◉	Animal based (Code M)
MV659 HiVeg peptone	**M659** Peptic digest of animal tissue

Recommended for	:	Non-selective differential medium for the detection of enteric pathogens.
Reconstitution	:	41.2 g/l
Quantity on preparation (500g)	:	12.13 L
pH (25°C)	:	7.4 ± 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
Yellow with bluish tinge coloured, homogeneous, free flowing powder.
Gelling
Firm, comparable with 1.3% Agar gel.
Colour and Clarity
Purplish blue coloured, clear to slightly opalescent gel forms in petri plates.
Reaction
Reaction of 4.12% w/v aqueous solution is pH 7.4± 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
Enterococcus faecalis (29212)	10^2-10^3	fair-good	>50%	red-blue
Escherichia coli (25922)	10^2-10^3	luxuriant	>70%	red
Salmonella serotype Typhimurium (14028)	10^2-10^3	luxuriant	>70%	blue
Shigella flexneri (12022)	10^2-10^3	luxuriant	>70%	blue
Staphylococcus aureus (25923)	10^2-10^3	good	>50%	red-blue

References :

1. Drigalski V. and Conrad H., 1902, Z. Hyg. Infektionskr., 39:283.
2. MacFaddin J.F., 1985, Media for Isolation-Cultivation-Identification-Maintenance of Medical Bacteria, Volume I, Williams and Wilkins, Baltimore.

◉ Prepared from GMO free Vegetable proteins replacing Animal based peptones. Freedom from BSE/TSE worries.