LPM HiVeg™ Agar Base MV1228

LPM (Lithium Phenylethanol Moxalactam) HiVeg Agar Base is recommended for isolation and cultivation of *Listeria monocytogenes* from food and dairy products.

Composition ** :

Ingredients	Grams/Litre
HiVeg hydrolysate	5.0
HiVeg peptone	5.0
HiVeg extract	3.0
Glycine anhydride	10.0
Lithium chloride	5.0
Sodium chloride	5.0
Phenyl ethyl alcohol	2.5
Agar	15.0

Final pH (at 25°C) 7.3 ± 0.2
** Formula adjusted, standardized to suit performance parameters.

Directions :

Suspend 50.5 grams in 1000 ml distilled water. Heat to boiling to dissolve the medium completely. Sterilize by autoclaving at 15 lbs pressure (121°C) for 12 minutes. Cool to 50°C and aseptically add rehydrated contents of 1 vial of Moxalactam Supplement (FD151). Mix well before pouring into sterile petri plates.
Caution: Lithium chloride is harmful. Avoid bodily contact and inhalation of vapours. On contact with skin, wash with plenty of water immediately.

Principle and Interpretation :

LPM HiVeg Agar Base is prepared by using HiVeg peptone, HiVeg hydrolysate and HiVeg extract which is free of BSE/ TSE risks associated with animal based peptones. LPM HiVeg Agar Base is the modification of LPM Agar Base which is modified McBride Agar developed by Lee and McClain (1) for the isolation of *Listeria monocytogenes*.
HiVeg hydrolysate, HiVeg peptone and HiVeg extract provides all essential nutrients for metabolism. Glycine anhydride, lithium chloride and phenyl ethyl alcohol suppress gram-positive cocci and gram-negative rods. Moxalactam inhibits both gram-positive and gram-negative bacteria including *Staphylococci, Proteus* and *Pseudomonas* species. *Listeria monocytogenes* show blue-green irridescence when examined with oblique transmitted light (2, 3).

Quality Control :

Appearance of powder
Light yellow coloured, may have slightly greenish tinge, homogeneous, free flowing powder.
Gelling
Firm, comparable with 1.5% Agar gel.
Colour and Clarity
Light yellow coloured, clear to slightly opalescent gel forms in petri plates.
Reaction
Reaction of 5.05% w/v aqueous solution is pH 7.3 ± 0.2 at 25°C.

Product Profile :

Vegetable based (Code MV)◉	Animal based (Code M)
MV1228 HiVeg hydrolysate HiVeg peptone HiVeg extract	**M1228** Casein enzymic hydrolysate Peptic digest of animal tissue Beef extract

Recommended for	: Isolation and cultivation of *Listeria monocytogenes* from food and dairy products,
Reconstitution	: 50.5 g/l
Quantity on preparation (100g)	: 1.98 L
pH (25°C)	: 7.3 ± 0.2
Supplement	: Moxalactam Supplement (FD151)
Sterilization	: 121°C / 12 minutes.

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

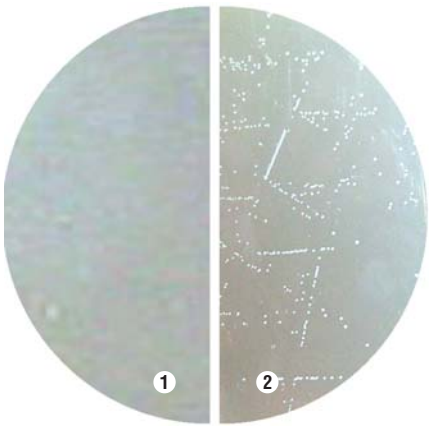
Cultural Response

Cultural characteristics observed after an incubation at 35 - 37°C for 24 - 48 hours.

Organisms (ATCC)	Inoculum (CFU)	Growth	Recovery
Escherichia coli (25922)	10^2-10^3	inhibited	0%
Listeria monocytogenes (19111)	10^2-10^3	good-luxuriant	>50%
Listeria monocytogenes (19112)	10^2-10^3	good-luxuriant	>50%
Listeria monocytogenes (19117)	10^2-10^3	good-luxuriant	>50%
Pseudomonas aeruginosa (27853)	10^2-10^3	inhibited	0%
Staphylococcus aureus (25923)	10^2-10^3	inhibited	0%

References :

1. Lee and McClain, 1986, Appl. Environ. Microbiol., 52:1215.
2. Bearns and Girard, 1959, Am. J. Med. Technol., 25:120.
3. Borterelssi, Schtech and Albritton, 1985, Manual of Clinical Microbiology, Lennette, Balows, Hausler and Shadomy (Eds.), 4th ed., ASM, Washington, D.C.



MV1228 LPM HiVeg Agar Base
(Against dark background)
1. Control
2. *Listeria monocytogenes*

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