L.D. HiVeg™ Agar MV742

L.D. HiVeg Agar is used for cultivation and identification of fastidious anaerobic bacteria.

Composition ** :

Ingredients	Grams/Litre
HiVeg hydrolysate	5.0
Yeast extract	5.0
Sodium chloride	2.5
Sodium sulphite	0.1
L-Cystine	0.4
L-Tryptophan	0.2
Vitamin K1	0.01
Ferric pyrophosphate	0.01
Agar	20.0

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

Directions :

Suspend 33.22 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 hydrolysate and Ferric pyrophosphate instead of Casein enzymic hydrolysate and Hemin respectively making the medium free from BSE/TSE risk. L.D. HiVeg Agar is the modification of Lombard Dowell (L.D.) Agar which was developed by Lombard and Dowell (1) for cultivating fastidious anaerobic bacteria. L.D. HiVeg Agar evaluates the degree of growth of the fastidious anaerobic bacteria like *Bacteroides* and *Clostridia* and also Catalase test and Indole production.
The medium contains various nutritious substances which can promote the growth of fastidious anaerobic bacteria. HiVeg hydrolysate and yeast extract provide the necessary nitrogenous nutrients while ferric pyrophosphate and Vitamin K1 supply additional growth factors. L-Cysteine and L-Tryptophan serves as the amino acid sources. Sodium sulphite is an antioxidant. Sodium chloride maintains osmotic balance of the medium. Catalase-positive reaction may not be evident until 30 seconds to 1 minute after application of 3% hydrogen peroxide (2, 3).

Quality Control :

Appearance of powder
Yellow coloured, may have slightly greenish tinge, homogeneous, free flowing powder.

Product Profile :

Vegetable based (Code MV)◉	Animal based (Code M)
MV742 HiVeg hydrolysate Ferric pyrophosphate	**M742** Casein enzymic hydrolysate Hemin

Recommended for	:	Cultivation and identification of fastidious anaerobic bacteria.
Reconstitution	:	33.22 g/l
Quantity on preparation (500g)	:	15.05 L
(100g)	:	3.01 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.

Gelling
Firm, comparable with 2.0% Agar gel.

Colour and Clarity
Medium amber coloured, clear to slightly . opalescent gel forms in petri plates.

Reaction
Reaction of 3.32% 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 40 - 48 hours under anaerobic conditions.

Organisms (ATCC)	Inoculum (CFU)	Growth	Indole	Catalase
Bacteroides fragilis (25285)	10^2-10^3	good to luxuriant	-	+
Bactroides corrodens	10^2-10^3	good to luxuriant	-	-
Fusobacterium necrophorum (25286)	10^2-10^3	good to luxuriant	+	-
Fusobacterium nucleatum (25586)	10^2-10^3	good to luxuriant	+	-

References :

1. Dowell V. and Lombard G., June 1977, U.S., DHEW, Center for Disease Control (CDC), Atlanta, Ga.
2. Koneman E., Allen S., Dowell V. and Sommers H., 1979, Colour Atlas and Textbook of Diagnostic Microbiology, J.B. Lippincott Co., Philadelphia.
3. MacFaddin J.F., 1985, Media for Isolation-Cultivation-Identification-Maintenance of Medical Bacteria, Vol.I, Williams and Wilkins, Baltimore.

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