

Vibrio HiVeg™ Agar**MV820**

Vibrio HiVeg Agar is used for selective cultivation of *Vibrio* species.

Composition ** :

Ingredients	Grams/Litre
Yeast extract	5.0
HiVeg hydrolysate	8.0
HiVeg peptone No. 3	3.0
Sucrose	20.0
Sodium thiosulphate, 5H ₂ O	6.5
Sodium citrate. 2H ₂ O	10.0
Synthetic detergent No. III	1.0
Sodium chloride	10.0
Synthetic detergent No. II	1.0
Sodium lauryl sulphate	0.2
China blue	0.2
Cresol red	0.2
Agar	15.0

Final pH (at 25°C) 8.5 ± 0.2

** Formula adjusted, standardized to suit performance parameters.

Directions :

Suspend 74.84 grams of dehydrated medium in 1000 ml distilled water. Heat to boiling to dissolve the medium completely. DO NOT AUTOCLAVE. Cool to 45 - 50°C and pour into sterile petri plates.

Principle and Interpretation :

Vibrio HiVeg Agar is prepared by using vegetable peptones in place of animal based peptones that makes the medium free of BSE/TSE risks. Vibrio HiVeg Agar is the modification of Vibrio Agar which is a selective medium for the isolation of *Vibrio cholerae*, *Vibrio parahaemolyticus* as well as other *Vibrios* (1).

HiVeg hydrolysate, HiVeg peptone No.3 and yeast extract provide nitrogenous, carbonaceous compounds, sulphur, vitamin B complex and other essential growth nutrients. Sodium citrate, and synthetic detergents inhibit gram-positive organisms and coliforms. Sucrose is the fermentable carbohydrate while thiosulphate acts as a sulphur source. Alkaline pH of this medium helps in recovery of *Vibrio cholerae*. China blue and cresol red are pH indicators.

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

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

Reaction

Reaction of 7.48% w/v aqueous solution is pH 8.5 ± 0.2 at 25°C.

Product Profile :

Vegetable based (Code MV)©	Animal based (Code M)
MV820 HiVeg hydrolysate HiVeg peptone No. 3 Synthetic detergent No. II Synthetic detergent No. III	M820 Casein enzymic hydrolysate Proteose Peptone Oxgall Sodium deoxycholate
Recommended for	: Selective cultivation of <i>Vibrio</i> species.
Reconstitution	: 74.84 g/l
Quantity on preparation (500g)	: 6.68 L
pH (25°C)	: 8.5 ± 0.2
Supplement	: None
Sterilization	: Boiling (DO NOT AUTOCLAVE)
Storage	: Dry Medium-Below 30°C, Prepared Medium 2-8°C.

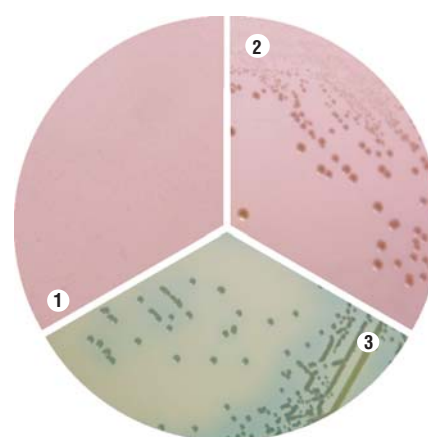
Cultural Response

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

Organisms (ATCC)	Inoculum (CFU)	Growth	Recovery	Colour of colony
<i>Enterococcus faecalis</i> (29212)	10 ² -10 ³	none-poor	<20%	yellow
<i>Escherichia coli</i> (25922)	10 ² -10 ³	inhibited	0%	-
<i>Pseudomonas aeruginosa</i> (27853)	10 ² -10 ³	none-poor	<20%	blue
<i>Salmonella</i> serotype Typhi (6539)	10 ² -10 ³	inhibited	0%	-
<i>Shigella flexneri</i> (12022)	10 ² -10 ³	inhibited	0%	-
<i>Vibrio cholerae</i> (15748)	10 ² -10 ³	good-luxuriant	>50%	blue
<i>Vibrio parahaemolyticus</i> (17802)	10 ² -10 ³	good-luxuriant	>50%	slightly reddish

References :

1. Atlas, R.M. 1993, Handbook of Microbiological Media, Parks, L.C. (Ed.), CRC Press, Boca Raton.

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1. Control
2. *Vibrio parahaemolyticus*
3. *Vibrio cholerae*