Vibrio Parahaemolyticus Sucrose HiVeg™ Agar MV1153

Vibrio Parahaemolyticus Sucrose HiVeg Agar is used for isolation and enumeration of *Vibrio parahaemolyticus* from sea foods.

Composition ** :

Ingredients	Grams/Litre
HiVeg hydrolysate No. 1	5.0
HiVeg hydrolysate	5.0
Yeast extract	7.0
Sucrose	10.0
Sodium chloride	30.0
Synthetic detergent No. I	1.5
Bromo thymol blue	0.025
Agar	15.0

Final pH (at 25°C) 8.6 ± 0.2
** Formula adjusted, standardized to suit performance parameters.

Directions :

Suspend 73.52 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. Dispense in sterile petri plates.

Principle and Interpretation :

This medium is prepared by using vegetable peptones in place of animal based peptones which makes the medium free of BSE/TSE risks. Vibrio Parahaemolyticus Sucrose HiVeg Agar is the modification of Vibrio Parahaemolyticus Sucrose Agar (VPSA) which is recommended by APHA (1) for isolating and enumerating *Vibrio parahaemolyticus* from sea foods. It is a differential medium (and also selective to some extent) which distinguishes *Vibrio parahaemolyticus* from other marine *Vibrios* species.
Suspected seafood sample when diluted and blended with sterile HiVeg Peptone Tween Salt Diluent (prepared by dissolving 1.0gm of HiVeg Peptone and 10.0gm of Tween 80 in 1 litre of distilled water and autoclaved at 121°C for 15 mins), is filtered through HGMF using sterile diluent as a carrier. HGMF is then aseptically transferred to the Tryptone Soya HiVeg Agar w/ Magnesium Sulphate (TSAMS) plates and incubated for 4 hours at 35°C. HGMF is then transferred from TSAMS to the dry VPS HiVeg Agar plate and incubated for 18 - 20 hours at 42°C.
HiVeg hydrolysate No.1, HiVeg hydrolysate and yeast extract provide the necessary nitrogen compounds, growth factors and vitamin B complex for the growth of *Vibrio parahaemolyticus*. Sucrose is the fermentable carbohydrate. Bromo thymol blue is the pH indicator. Synthetic detergent No. 1 inhibits the contaminating gram-positive bacteria. High salt content and alkaline pH of the medium meet the requirement of marine *Vibrio* and facilitates easy recovery of the organism respectively. *Vibrio parahaemolyticus* ferment sucrose and forms green to blue colonies.

Product Profile :

Vegetable based (Code MV)◉	Animal based (Code M)
MV1153	**M1153**
HiVeg hydrolysate No. 1	Tryptose
HiVeg hydrolysate	Casein enzymic hydrolysate
Synthetic detergent No. I	Bile salts mixture

Recommended for	:	Isolation and enumeration of *Vibrio parahaemolyticus* from sea foods.
Reconstitution	:	73.52 g/l
Quantity on preparation (500g)	:	6.80 L
pH (25°C)	:	8.6 ± 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 coloured, may have slightly greenish tinge, homogeneous, free flowing powder.
Gelling
Firm, comparable with 1.5% Agar gel.
Colour and Clarity
Blue coloured, clear to slightly opalescent gel forms in petri plates.
Reaction
Reaction of 7.35% w/v aqueous solution is pH 8.6 ± 0.2 at 25°C.
Cultural Response
Cultural characteristics observed after an incubation at 42°C for 18-24 hours.

Organisms (ATCC)	Inoculum (CFU)	Growth	Recovery	Colour of colony
Staphylococcus aureus (25923)	10^2-10^3	inhibited	0%	-
Vibrio parahaemolyticus (17802)	10^2-10^3	luxuriant	>50%	blue-green

References :

1. Downes FP and Ito K (Eds.), 2001, Compendium of Methods For The Microbiological Examination of Foods, 4th ed., APHA, Washington, D.C.