

PSTA Enrichment HiVeg™ Broth Base

MV940

PSTA Enrichment HiVeg Broth Base is recommended for secondary enrichment of *Yersinia enterocolitica* from foods.

Composition ** :

Ingredients	Grams/Litre
HiVeg peptone	1.0
Sucrose	1.0
Tris hydroxymethyl aminomethane	3.0
Brilliant green	0.0125
Sodium azide	0.192

Final pH (at 25°C) 8.3 ± 0.2

** Formula adjusted, standardized to suit performance parameters.

Directions :

Suspend 5.2 grams in 1000 ml distilled water. Heat if necessary to dissolve the medium completely. Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes. Cool to 45-50°C and aseptically add Ampicillin to a final concentration of 0.005 g/lit. Mix well.

Warning: Sodium Azide has a tendency to form explosive metal azides with plumbing materials. It is advisable to use enough water to flush off the disposables.

Principle and Interpretation :

This medium is prepared by completely replacing animal based peptones with vegetable peptones that makes the medium free of BSE/TSE risks. PSTA Enrichment HiVeg Broth Base is the modification of PSTA Enrichment Broth Base formulated in accordance with APHA (1). It is



MV940 PSTA Enrichment HiVeg Broth Base

1. Control
2. *Yersinia enterocolitica*

Product Profile :

Vegetable based (Code MV)Ⓞ	Animal based (Code M)
MV940 HiVeg peptone	M940 Peptic digest of animal tissue

Recommended for : Secondary enrichment of *Yersinia enterocolitica* from foods.

Reconstitution : 5.2 g/l

Quantity on preparation (500g) : 96.15 L

(100g) : 19.23 L

pH (25°C) : 8.3 ± 0.2

Supplement : Ampicillin

Sterilization : 121°C /15 minutes.

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

recommended for secondary or selective enrichment of *Yersinia enterocolitica*. HiVeg peptone provides nitrogenous compounds. Sucrose acts as the energy source. Tris hydroxymethyl aminomethane is the biological buffer. This medium has higher selectivity due to presence of sodium azide and brilliant green. Secondary enrichment following primary enrichment is advantageous. Secondary enrichment medium has higher selectivity. PSTA Enrichment HiVeg Broth is inoculated from a cold enrichment medium e.g. PSB Enrichment HiVeg Broth and incubated at 28°C for 48 hours which is further inoculated on selective agar media as MacConkey HiVeg Agar (MV081), SS HiVeg Agar (MV108) and *Yersinia* Selective HiVeg Agar Base (MV843).

Quality Control :**Appearance of powder**

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

Colour and Clarity

Greenish coloured, clear to slightly opalescent solution.

Reaction

Reaction of 0.52% w/v aqueous solution is pH 8.3 ± 0.2 at 25°C.

Cultural Response

Cultural characteristics observed after an incubation at 30°C ± 2°C for 48 hours.

Organisms (ATCC)	Inoculum (CFU)	Growth
<i>Yersinia enterocolitica</i> (27729)	10 ² -10 ³	good-luxuriant

References :

1. Speck M (Ed.), 1984, Compendium of Methods for the Microbiological Examination of Foods, 2nd ed., APHA, Washington, DC.