

Tryptone Broth, HiVeg™ (Tryptone Water, HiVeg™)**MV463**

Tryptone Broth, HiVeg (Tryptone Water, HiVeg) is used for the detection of indole production by coliforms.

Composition ** :

Ingredients	Grams/Litre
HiVeg hydrolysate	10.0
Sodium chloride	5.0

Final pH (at 25°C) 7.5 ± 0.2

** Formula adjusted, standardized to suit performance parameters.

Directions :

Dissolve 15 grams in 1000 ml distilled water. Heat if necessary to dissolve the medium completely. Dispense into tubes and sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes.

Principle and Interpretation :

This medium is prepared by using HiVeg hydrolysate in place of Casein enzymic hydrolysate which makes the medium free of BSE/TSE risks. HiVeg hydrolysate is a good substrate for indole production because of its high tryptophan content. Certain organisms breakdown the amino acid tryptophan with the help of enzymes that mediate the production of indole by hydrolytic activity (1). The indole produced can be detected by either Kovac's or Ehrlich's reagent (2). Indole combines with the aldehyde present in the above reagent to give red colour in the alcohol layer. The alcohol layer extracts and concentrates the red colour complex.



MV463 Tryptone Broth, HiVeg

1. Control
2. *Escherichia coli*
3. *Enterobacter aerogenes*

Product Profile :

Vegetable based (Code MV)©	Animal based (Code M)
MV463 HiVeg hydrolysate	M463 Casein enzymic hydrolysate
Recommended for	Detection of indole production by coliforms.
Reconstitution	15.0 g/l
Quantity on preparation (500g)	33.33 L
(100g)	6.66 L
pH (25°C)	7.5 ± 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**

Light yellow coloured, may have a slightly greenish tinge, homogeneous, free flowing powder.

Colour and Clarity

Yellow coloured, clear solution without any precipitate.

Reaction

Reaction of 1.5% w/v aqueous solution is pH 7.5 ± 0.2 at 25°C.

Cultural Response

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

Organisms (ATCC)	Inoculum (CFU)	Growth	Indole reaction
<i>Enterobacter aerogenes</i> (13048)	10 ² -10 ³	luxuriant	-
<i>Escherichia coli</i> (25922)	10 ² -10 ³	luxuriant	+
<i>Klebsiella pneumoniae</i> (13883)	10 ² -10 ³	luxuriant	-

References :

1. MacFaddin J.F., 2000(ed), Biochemical Tests for Identification of Medical Bacteria, 3rd edition, Lippincott Williams and Wilkins, New York
2. Finegold and Baron, 1986, Bailey and Scott's Diagnostic Microbiology, 7th ed., The C.V. Mosby Co., St. Louis.