Peptone Iron HiVeg™ Agar MV440

Peptone Iron HiVeg Agar is used for detection of hydrogen sulfide production by microorganisms.

Composition ** :

Ingredients	Grams/Litre
HiVeg peptone	15.0
HiVeg peptone No. 3	5.0
Ferric ammonium citrate	0.5
Sodium glycerophosphate	1.0
Sodium thiosulphate	0.08
Agar	15.0

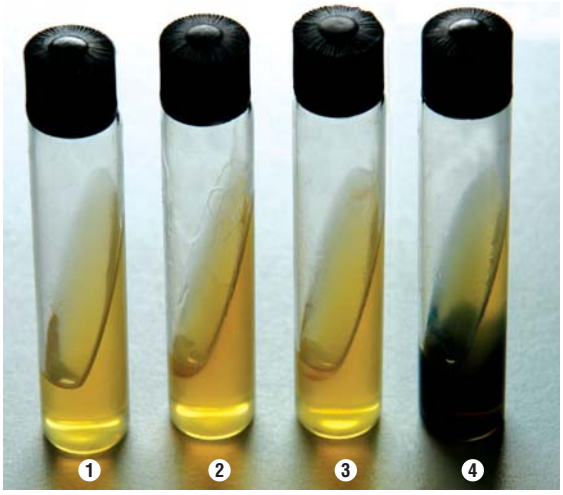
Final pH (at 25°C) 6.7 ± 0.2
** Formula adjusted, standardized to suit performance parameters.

Directions :

Suspend 36.58 grams in 1000 ml distilled water. Heat to boiling to dissolve the medium completely. Dispense in test tubes and sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes. Allow the tubed medium to cool in an upright position.

Principle and Interpretation :

This medium is prepared by using HiVeg peptone and HiVeg peptone No.3 which are free from BSE/TSE risks associated with animal based peptones. Peptone Iron HiVeg Agar is the modification of formulation described by Levine et al (1,2) This medium contains HiVeg peptones and ferric ammonium citrate is used for the detection of H_2S (hydrogen sulphide) production by microorganisms. This medium is helpful in differentiating the strains which are Voges-Proskauer negative, methyl red positive and citrate positive from the other strains of *Enterobacteriaceae* family.



MV440 Peptone Iron HiVeg Agar
1. Control
2. *Enterobacter aerogenes*
3. *Escherichia coli*
4. *Salmonella* serotype Enteritidis

Product Profile :		
Vegetable based (Code MV)◉		**Animal based** (Code M)
MV440 HiVeg peptone HiVeg peptone No. 3		**M440** Peptic digest of animal tissue Proteose Peptone
Recommended for	:	Detection of hydrogen sulfide production by microorganisms
Reconstitution	:	36.58 g/l
Quantity on preparation (100g)	:	2.73 L
pH (25°C)	:	6.7 ± 0.2
Supplement	:	None
Sterilization	:	121°C / 15 minutes.
Storage : Dry Medium - Below 30°C, Prepared Medium 2 - 8°C.		

Ferric ammonium citrate is a better hydrogen sulphide indicator as compared to lead acetate, as it gives earlier and clearer results.
HiVeg peptone and HiVeg peptone No.3 provide nitrogenous compounds, sulphur and trace elements. Sodium thiosulphate and ferric ammonium citrate forms the hydrogen sulphide detecting system. Sodium glycerophosphate buffers the medium.

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
Light amber coloured, slightly opalescent gel forms in tubes.
Reaction
Reaction of 3.66% w/v aqueous solution is pH 6.7 ± 0.2 at 25°C.
Cultural Response
Cultural characteristics observed after an incubation at 35-37°C for 18-48 hours.

Organisms (ATCC)	Inoculum (CFU)	Growth	Recovery	H_2S production
Enterobacter aerogenes (13048)	10^2-10^3	luxuriant	>70%	-
Escherichia coli (25922)	10^2-10^3	luxuriant	>70%	-
Salmonella serotype Typhi (6539)	10^2-10^3	luxuriant	>70%	+
Salmonella serotype Enteritidis (13076)	10^2-10^3	luxuriant	>70%	+

Key : + = blackening of the medium
- = no colour change

References :

1. Levine et al, 1934, Am. J. Publ. Health, 24:505.
2. Levine et al, 1932 Proc. Soc. Exp. Biol. Med. 29 :1022.

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

HIMEDIA®