Phenolphthalein Phosphate HiVeg™ Agar MV652

Phenolphthalein Phosphate HiVeg Agar is recommended for identification of phosphatase positive colonies of *Staphylococcus aureus.*

Composition ** :

Ingredients	Grams/Litre
HiVeg peptone	5.0
HiVeg extract	3.0
Sodium chloride	5.0
Sodium phenolphthalein phosphate	0.012
Agar	15.0

Final pH (at 25°C) 7.4 ± 0.2
** Formula adjusted, standardized to suit performance parameters.

Directions :

Suspend 28 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.

Principle and Interpretation :

This medium is prepared by using HiVeg peptone and HiVeg extract in place of Peptic digest of animal tissue and Beef extract which make the medium free of BSE/TSE risks. Phenolphthalein Phosphate HiVeg Agar is the modification of Phenolphthalein Phosphate Agar which is used for the identification of phosphatase positive colonies of *Staphylococccus aureus* which is a coagulase positive pathogenic strain (1). Phosphatase production is determined by the liberation of phenolphthalein which is indicated by the change in colour of the medium (2). When alkali is added to this medium, the liberated phenolphthalein gives bright pink - red colouration. HiVeg peptone and HiVeg extract supply the nitrogenous compounds, growth factors and trace ingredients essential for the growth of *Staphylococcus aureus*. Sodium phenolphthalein phosphate serves as a substrate for the phosphatase enzyme. Sodium chloride maintains osmotic equilibrium.

Quality Control :

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

Product Profile :

Vegetable based (Code MV)◉	Animal based (Code M)
MV652 HiVeg peptone HiVeg extract	**M652** Peptic digest of animal tissue Beef extract

Recommended for	:	Identification of phosphatase positive colonies of *Staphylococcus aureus*.
Reconstitution	:	28.0 g/l
Quantity on preparation (500g)	:	17.85 L
(100g)	:	3.57 L
pH (25°C)	:	7.4 ± 0.2
Supplement	:	None
Sterilization	:	121°C / 15 minutes.

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

Gelling
Firm, comparable with 1.5% Agar gel.
Colour and Clarity
Yellow coloured, clear gel forms in tubes as slants.
Reaction
Reaction of 2.8% w/v aqueous solution is pH 7.4 ± 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	Phosphatase*
Escherichia coli (25922)	10^2-10^3	luxuriant	-
Staphylococcus aureus (25923)	10^2-10^3	luxuriant	+
Staphylococcus epidermidis (12228)	10^2-10^3	luxuriant	+

Key : * = after incubation add 1 drop of 40% NaOH
+ = Bright pink-red colouration after addition of 40% NaOH

References :

1. MacFaddin J.F., 2000, Biochemical Tests for Identification of Medical Bacteria, 2nd ed., Williams and Wilkins, Baltimore.
2. Lewis B., 1961, J. Med. Lab. Technol., 18 : 112.
3. Barber M. and Kuper S.W.A., 1951, J. Pathol. Bacteriol., 63:65.