

## Cetrimide HiVeg™ Agar Base

MV024

Cetrimide HiVeg Agar Base is used for selective isolation of *Pseudomonas aeruginosa* from clinical specimens.

**Composition \*\* :**

Ingredients	Grams/Litre
HiVeg peptone No. 2	20.0
Magnesium chloride	1.4
Potassium sulphate	10.0
Cetrimide	0.3
Agar	15.0

Final pH (at 25°C ) 7.2 ± 0.2

\*\* Formula adjusted, standardized to suit performance parameters.

**Directions :**

Suspend 46.7 grams in 1000 ml distilled water containing 10 ml glycerol. Heat to boiling to dissolve the medium completely. Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes. If desired, rehydrated contents of 1 vial of Nalidixic Selective Supplement (FD130) may be added aseptically to 1000 ml medium.

**Principle and Interpretation :**

This medium is prepared by replacing Gelatin peptone with HiVeg Peptone No.2. Cetrimide HiVeg Agar Base is the modification of Cetrimide Agar Base which is based on the formula described by King et al (1). It is used as a selective medium for the isolation of *Pseudomonas aeruginosa* from pus, sputum and drains etc. Also used for determining the ability of an organism to produce fluorescein and pyocyanin. Cetrimide (Cetyltrimethylammonium bromide) is incorporated in the medium to inhibit bacteria other than *Pseudomonas aeruginosa*. It acts as a quaternary ammonium compound, cationic detergent that causes nitrogen and phosphorus to be released from bacterial cells other than *Pseudomonas aeruginosa*. For the isolation of *Pseudomonas aeruginosa*, plates of Cetrimide HiVeg Agar Base should be inoculated from non-selective medium such as Brain Heart Infusion Broth HiVeg (MV210) or Soyabean HiVeg medium (MV011). If the count is high the test sample can be directly inoculated onto this medium. *Pseudomonas aeruginosa* colonies may appear blue, blue-green or nonpigmented.

**Quality Control :****Appearance of powder**

Light 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, opalescent gel forms in petri plates.

**Reaction**

Reaction of 4.67% w/v aqueous solution containing 1% v/v glycerol is pH 7.2 ± 0.2 at 25°C.

**Product Profile :**

Vegetable based (Code MV) ©		Animal based (Code M)	
<b>MV024</b>	HiVeg peptone No. 2	<b>M024</b>	Pancreatic digest of gelatin
<b>Recommended for</b>	: Selective isolation of <i>Pseudomonas aeruginosa</i> from pus, sputum, drains etc.		
<b>Reconstitution</b>	: 46.7 g/l		
<b>Quantity on preparation (500g)</b>	: 10.7 L		
	<b>(100g)</b> : 2.14 L		
<b>pH (25°C)</b>	: 7.2 ± 0.2		
<b>Supplement</b>	: Glycerol, Nalidixic Selective Supplement (FD130), if desired		
<b>Sterilization</b>	: 121°C / 15 minutes.		
<b>Storage</b>	: Dry Medium - Below 30°C, Prepared Medium 2 - 8°C.		

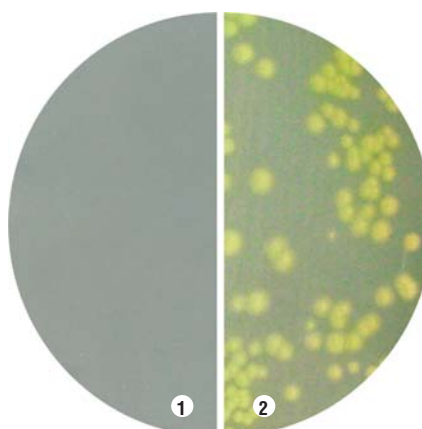
**Cultural Response**

Cultural characteristics observed after an incubation at 35-37°C for 24-48 hours.

Organisms (ATCC)	Inoculum (CFU)	Growth	Recovery	Colour of Colony
<i>Escherichia coli</i> (25922)	10 <sup>2</sup> -10 <sup>3</sup>	inhibited	0%	-
<i>Pseudomonas aeruginosa</i> (27853)	10 <sup>2</sup> -10 <sup>3</sup>	luxuriant	>50%	greenish yellow
<i>Pseudomonas maltophilia</i> (13637)	10 <sup>2</sup> -10 <sup>3</sup>	inhibited	0%	-
<i>Staphylococcus aureus</i> (25923)	10 <sup>2</sup> -10 <sup>3</sup>	inhibited	0%	-

**References :**

1. King, Ward and Raney, 1954, J. Lab. Clin. Med., 44:301.



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1. Control
2. *Pseudomonas aeruginosa*