

**SABHI HiVeg™ Agar Base****MV409**

SABHI HiVeg Agar Base with Chloramphenicol supplementation is used for cultivation and isolation of pathogenic fungi especially dermatophytes.

**Composition \*\* :**

Ingredients	Grams/Litre
HiVeg special infusion	4.11
HiVeg infusion	5.14
HiVeg peptone No. 3	5.0
HiVeg special peptone	5.0
Dextrose	21.0
Sodium chloride	2.5
Disodium phosphate	1.25
Agar	15.0

Final pH (at 25°C) 7.0 ± 0.2

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

**Directions :**

Suspend 29.5 grams in 500 ml of distilled water. Heat to boiling to dissolve the medium completely. Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes. Cool to 50-55°C and aseptically add rehydrated contents of 1 vial of Chloramphenicol Selective Supplement (FD033). Mix well and dispense into sterile tubes or plates and allow to solidify in a slanted position. To prepare blood agar, add 10% v/v sterile sheep or human blood before dispensing into sterile tubes or plates.

**Principle and Interpretation :**

SABHI HiVeg Agar Base is prepared by using vegetable peptones in place of animal peptones which make the medium free of BSE/TSE risks. SABHI HiVeg Agar Base is the modification of SABHI Agar Base which is prepared as per the formulation of Gorman (1) for the cultivation and isolation of pathogenic fungi like dermatophytes and also non-pathogenic fungi from clinical and nonclinical specimens (2). It is useful for maximum recovery of *Blastomyces dermatitidis* and *Histoplasma capsulatum* from body tissues and fluids. Addition of blood improves recovery of *Histoplasma capsulatum* and helps conversion of *Histoplasma capsulatum* and *Blastomyces dermatitidis* to the yeast phase.

HiVeg special infusion, HiVeg infusion, HiVeg peptone No.3, and HiVeg special peptone provides nitrogenous nutrients, carbon, sulphur and trace elements essential for fungal growth. Dextrose serves as carbon and energy source to the growing fungi. Sodium chloride maintains osmotic balance. Incorporation of a broad spectrum antibiotic like Chloramphenicol inhibits many gram-negative bacteria. Some fungi may also be inhibited by the antibiotics in this selective medium.

**Product Profile :**

Vegetable based (Code MV)©	Animal based (Code M)
<b>MV409</b> HiVeg special infusion HiVeg infusion HiVeg peptone No. 3 HiVeg special peptone	<b>M409</b> Calf brain infusion Beef heart infusion Proteose peptone Peptone special
<b>Recommended for</b>	: Cultivation and isolation of pathogenic fungi especially dermatophytes.
<b>Reconstitution</b>	: 59.0 g/l
<b>Quantity on preparation (500g)</b>	: 8.47 L
<b>pH (25°C)</b>	: 7.0 ± 0.2
<b>Supplement</b>	: Chloramphenicol Selective Supplement (FD033), Sterile sheep / human blood, if desired.
<b>Sterilization</b>	: 121°C / 15 minutes.
<b>Storage</b>	: Dry Medium - Below 30°C, Prepared Medium 2 - 8°C.

**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**

Basal medium forms yellow coloured, clear gel. With addition of 10% v/v blood, cherry red coloured opaque gel forms in petri plates.

**Reaction**

Reaction of 5.9% w/v aqueous solution is pH 7.0 ± 0.2 at 25°C.

**Cultural Response**

Cultural characteristics observed after an incubation at 25 - 30°C for 40 - 48 hours with added Chloramphenicol Selective Supplement (FD033).

Organisms (ATCC)	Growth w/o blood	Growth w/blood
<i>Aspergillus niger</i> (16404)	good	good
<i>Candida albicans</i> (10231)	good-luxuriant	luxuriant
<i>Escherichia coli</i> (25922)	inhibited	inhibited
<i>Saccharomyces cerevisiae</i> (9763)	good-luxuriant	luxuriant
<i>Saccharomyces uvarum</i> (9080)	good-luxuriant	luxuriant
<i>Staphylococcus aureus</i> (25923)	inhibited	inhibited

**References :**

- Gorman, 1967, Am. J. Med. Technol., 33:151.
- Murray PR, Baron, Pfaller, and Tenenbaum (Eds.), 2003, In Manual of Clinical Microbiology, 8<sup>th</sup> ed., ASM, Washington, D.C.