

B.Y.E. HiVeg™ Agar / Broth Base**MV470 / MV471**

BYE HiVeg Agar / Broth Base is a simplified HiVeg medium developed for the cultivation of *Mycoplasma* or Pleuropneumonia like organisms and L-forms of bacteria.

Composition :**

	MV470	MV471
Ingredients	Grams/Litre	Grams/Litre
HiVeg peptone No. 3	10.0	10.0
HiVeg special infusion	7.5	7.5
HiVeg infusion	10.0	10.0
Dextrose	2.0	2.0
Sodium chloride	5.0	5.0
Disodium phosphate	2.5	2.5
Yeast extract	2.0	2.0
Agar	13.0	-

Final pH (at 25°C) 7.9 ± 0.2

** Formula adjusted, standardized to suit performance parameters

Directions :

Suspend 52 grams of MV470 or 39 grams of MV471 in 850 ml 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°C and add 150 ml of sterile human or animal blood or serum. Mix gently and pour into sterile plates.

Principle and Interpretation :

These media are prepared by completely replacing animal based peptones by vegetable peptones. BYE HiVeg media are simple media developed for cultivation and routine studies of distribution, habitat and possible pathogenesis of *Mycoplasma* - Pleuropneumonia like organisms and L-forms of bacteria by Barile, Yaguchi and Eveland (1). Inoculations are made in duplicates. One set is incubated aerobically while the other anaerobically for 48 hours or more. Usually growth occurs within 3-5 days, however, negative results are reported after 10 days. Anaerobic conditions are most important for the first 3 days while secondary transfers can be incubated aerobically. These media can be used for isolation of PPLOS from urethritis, penile ulcerations and cervical specimens and L-forms of *Corynebacterium*, *Neisseria*, *Streptococcus*. This is also used for detecting PPLO contamination of tissue culture and cell-lines (2) and for membrane filter work (3). In BYE HiVeg Broth PPLOS, grow at the bottom of the broth as a fine flocculum.

Product Profile :

Vegetable based (Code MV)©	Animal based (Code M)
MV470/MV471 HiVeg special infusion HiVeg infusion HiVeg peptone No.3	M470/M471 Brain infusion Heart infusion Proteose peptone
Recommended for	: Cultivation of <i>Mycoplasma</i> or Pleuropneumonia like organisms and L-forms of bacteria.
Reconstitution	: (MV470) : 52.0 g/l : (MV471) : 39.0 g/l
Quantity on preparation (500g) :	(MV470) : 9.61 L (500g) : (MV471) : 12.82 L
pH (25°C)	: 7.9 ± 0.2
Supplement	: Sterile human or animal blood or serum
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 slightly greenish tinge, homogeneous, free flowing powder.

Gelling

Firm, comparable with 1.3% Agar gel of MV470.

Colour and Clarity

Yellow coloured, clear to slightly opalescent gel forms in petri plates, clear solution in tubes.

Reaction

Reaction of 5.2% w/v of MV470 or 3.9% w/v of MV471 aqueous solution is pH 7.9 ± 0.2 at 25°C.

Cultural Response

Cultural characteristics observed after an incubation at 35°C for 5-10 days, under humidified anaerobic conditions.

Organisms (ATCC)

Mycoplasma bovis (25523)
Mycoplasma gallinarum (19708)
Mycoplasma pneumoniae (15531)
Streptococcus pneumoniae (6303)

Growth

good - luxuriant
good - luxuriant
good - luxuriant
good - luxuriant

References :

1. Barile, Yaguchi, Eveland, 1958, Am. J. Clin. Path., 30:171.
2. Barile, 1962, National Cancer Institute Monograph, No.7:5.
3. Barile, 1962, J. Bact, 83:430.