

Glucose HiVeg™ Peptone Agar

MV758

Glucose HiVeg Peptone Agar is a highly nutritious medium used for cultivation of *Agrobacterium* and wide variety of microorganisms.

Composition :**

Ingredients	Grams/Litre
HiVeg peptone	20.00
Dextrose	10.00
Sodium chloride	5.00
Agar	15.00

Final pH (at 25°C) 7.2 ± 0.2

** Formula adjusted, standardized to suit performance parameters

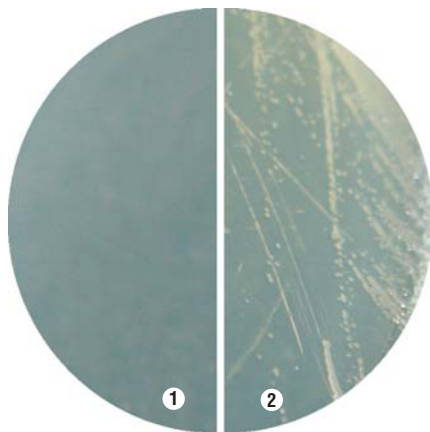
Directions :

Suspend 50 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 completely replacing animal based Peptic digest of animal tissue with HiVeg peptone and is the modification of Glucose Peptone Agar. Therefore it is free of TSE/BSE risks. It can also be used for cultivation of thermophilic organisms associated with flat sour spoilage in canned goods.

Glucose HiVeg Peptone Agar like the conventional Glucose Peptone Agar with addition of bromocresol purple (1% alcoholic solution) is suitable for cultivation of root nodulating bacteria (1). HiVeg peptone provides nitrogenous nutrients especially amino acids and peptides. The presence of sodium chloride helps to maintain osmotic balance. Dextrose provides carbon and energy source. This medium supports growth of *Agrobacterium* species, as it grows abundantly in media containing dextrose as carbohydrate source (2).



MV758 Glucose HiVeg Peptone Agar
(Against dark background)

1. Control
2. *Agrobacterium tumefaciens*

Product Profile :

Vegetable based (Code MV)Ⓞ	Animal based (Code M)
MV758 HiVeg peptone	M758 Peptic digest of animal tissue

Recommended for : Cultivation of a wide variety of microorganisms and *Agrobacterium* species.

Reconstitution : 50.0 g/l

Quantity on preparation (500g): 10.0 L

pH (25°C) : 7.2 ± 0.2

Supplement : None

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 1.5% Agar gel.

Colour and Clarity

Light yellow coloured, clear to slightly opalescent gel forms in petri plates.

Reaction

Reaction of 5.0% w/v aqueous solution is pH 7.2 ± 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	Recovery
<i>Agrobacterium tumefaciens</i> (23308)	10 ² -10 ³	good-luxuriant	> 70%
<i>Escherichia coli</i> (25922)	10 ² -10 ³	good-luxuriant	> 70%
<i>Pseudomonas aeruginosa</i> (27853)	10 ² -10 ³	good-luxuriant	> 70%
<i>Staphylococcus aureus</i> (25923)	10 ² -10 ³	good-luxuriant	> 70%
<i>Enterococcus faecalis</i> (29212)	10 ² -10 ³	good-luxuriant	> 70%

References :

1. Subba Rao, N.S. 1977, Soil microorganisms and plant growth, Oxford and IBH publishing Co., India.
2. Ronald M. Atlas (2004), Handbook of Microbiological Media, Lawrence C. Parks (ed.), 3rd Edition, CRC Press, p. No. 717.