

Soyabean HiVeg™ Agar

MV290

Soyabean HiVeg Agar is used as a general purpose medium with or without blood or other enrichment for isolating a wide variety of fastidious organisms.

Composition ** :

| Ingredients | Grams/Litre |
|--------------------------------|-------------|
| HiVeg hydrolysate | 15.0 |
| Papaic digest of soyabean meal | 5.0 |
| Sodium chloride | 5.0 |
| Agar | 15.0 |

Final pH (at 25°C) 7.3 ± 0.2

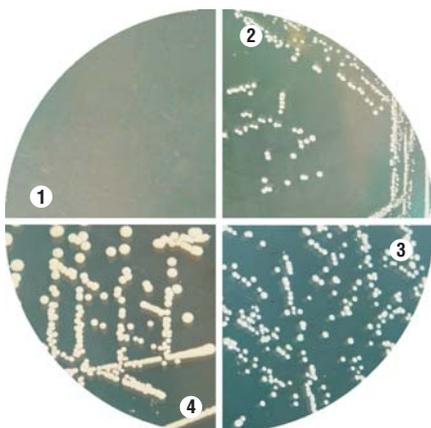
** Formula adjusted, standardized to suit performance parameters.

Directions :

Suspend 40.0 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. If desired, aseptically add 5% v/v defibrinated blood in previously cooled medium to 45-50°C for cultivation.

Principle and Interpretation :

This medium is prepared by completely replacing animal based peptones with vegetable peptones that are free of BSE/TSE risks. Soyabean HiVeg Agar is the modification of Soyabean Casein Digest Agar with replacement of Casein enzymic hydrolysate by HiVeg hydrolysate. Soyabean HiVeg Agar can be used as a general purpose medium used for multiple applications e.g. as a blood culture medium, as maintenance medium for culture collections (including maintenance of stock cultures), for testing bacterial contaminants and isolating fastidious organisms on enrichment with blood. It serves as a nutritive base to which variety of supplements can be added. On supplementation with blood it can be also used to determine haemolytic bacteria (1,2). This medium can also be used for sensitivity testing by tube dilution method of antimicrobial agents, plate counting ,against animal based Soyabean Casein Digest Agar. This medium is employed for cultivation and



MV290 Soyabean HiVeg Agar
(Against dark background)

1. Control
2. *Streptococcus pyogenes*
3. *Staphylococcus aureus*
4. *Candida albicans*

Product Profile :

| Vegetable based (Code MV)© | Animal based (Code M) |
|-----------------------------------|---|
| MV290 HiVeg hydrolysate | M290 Casein enzymic hydrolysate |

Recommended for : Cultivation of a wide variety of microorganisms.

Reconstitution : 40.0 g/l

Quantity on preparation (500g) : 12.5 L
(100g) : 2.5 L

pH (25°C) : 7.3 ± 0.2

Supplement : Defibrinated blood, if desired

Sterilization : 121°C / 15 minutes.

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

isolation of fastidious and non-fastidious microorganisms. HiVeg hydrolysate and Papaic digest of soyabean meal makes this media nutritious by providing amino acids and long chain peptides for the growth of microorganisms. Sodium chloride maintains the osmotic balance in the medium.

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 yields light yellow coloured, clear to slightly opalescent gel in petri plates. With the addition of blood, cherry red coloured opaque gel forms in petri plates.

Reaction

Reaction of 4.0% w/v aqueous solution is pH 7.3 ± 0.2 at 25°C.

Cultural Response

Cultural characteristics observed after an incubation at 35 - 37°C for 18-48 hours.

| Organisms (ATCC) | Inoculum (CFU) | Growth | Growth w/blood | Recovery*** | Haemolysis |
|---------------------------------------|----------------------------------|----------------|----------------|-------------|------------|
| <i>Bacillus subtilis</i> (6633) | 10 ² -10 ³ | luxuriant | luxuriant | >70% | none |
| <i>Bacteroides vulgatus</i> ** (8482) | 10 ² -10 ³ | luxuriant | luxuriant | >70% | none |
| <i>Candida albicans</i> * (10231) | 10 ² -10 ³ | luxuriant | luxuriant | >70% | none |
| <i>Neisseria meningitidis</i> (13090) | 10 ² -10 ³ | good | luxuriant | >70% | none |
| <i>Staphylococcus aureus</i> (25923) | 10 ² -10 ³ | luxuriant | luxuriant | >70% | Beta |
| <i>Streptococcus pyogenes</i> (19615) | 10 ² -10 ³ | good-luxuriant | luxuriant | >70% | Beta |

Key: * = This culture was incubated at 25-30°C for 2-7 days.

** = When incubated anaerobically.

*** = with blood

References :

1. MacFaddin 1985, Media for isolation-cultivation-identification-maintenance medical bacteria Vol. 1, Williams, & Wilkins, Baltimore, MD.
2. Forbes BA, Sahn DF, Weissfeld AS, 2002, Bailey and Scott's Diagnostic Microbiology, 11th ed., The C.V. Mosby Co., St. Louis.