G.C. HiVeg Agar Base, with added blood, haemoglobin and other supplements is recommended for selective isolation and cultivation of Gonococci.

Composition** :

<table>
<thead>
<tr>
<th>Ingredients</th>
<th>Grams/Litre</th>
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</thead>
<tbody>
<tr>
<td>HiVeg special peptone</td>
<td>15.00</td>
</tr>
<tr>
<td>Corn starch</td>
<td>1.00</td>
</tr>
<tr>
<td>Dipotassium phosphate</td>
<td>4.00</td>
</tr>
<tr>
<td>Monopotassium phosphate</td>
<td>1.00</td>
</tr>
<tr>
<td>Sodium chloride</td>
<td>5.00</td>
</tr>
<tr>
<td>Agar</td>
<td>10.00</td>
</tr>
</tbody>
</table>

Final pH (at 25°C) 7.2 ± 0.2

** Formula adjusted, standardized to suit performance parameters

Directions :

Suspend 7.2 grams in 100 ml distilled water to make a double strength base. Heat to boiling and dissolve the medium completely. Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes. Cool to 50°C and aseptically add separately prepared Haemoglobin (FD022) (100 ml sterile 2% solution) and GC Supplement (FD021). Mix well and pour into sterile petri plates. To increase the selectivity of medium antibiotic supplements may be added as VCN Supplement (FD023), VCNT Supplement (FD024), Linco T Supplement (FD026), Vanclo T Supplement (FD028). To enhance the nutritional properties of medium, Vitamino Growth Supplement (FD025) or Yeast Autolysate Supplement (FD027) may be added.

Principle and Interpretation :

This medium is prepared by replacing Peptone special with HiVeg special peptone which is free from BSE/TSE risks. G.C. HiVeg Agar Base with added blood or haemoglobin and other supplements is recommended for selective isolation and cultivation of fastidious organisms like Gonococci and Haemophilus species. This medium can also be employed as a basal medium in the preparation of Chocolate HiVeg Agar (MV103) and Thayer Martin HiVeg Medium Base (MV413). Originally, animal based Chocolate Agar was developed by Johnston for the growth of fastidious Neisseria gonorrhoeae within 24 hours (1). Addition of haemoglobin to this medium had improved the growth, as studied by Carpenter and Morton (2). Incubation is to be done at 37°C in an atmosphere of 5-10% carbon dioxide and 70% humidity. It is recommended that all selective isolation and cultivation of fastidious organisms like Gonococci, Neisseria, Haemophilus, Streptococcus species. This medium is prepared by replacing Peptone special with HiVeg special peptone as VCN Supplement (FD023), VCNT Supplement (FD024), Linco T Supplement (FD026), Vanclo T Supplement (FD028). Vitamino Growth Supplement (FD025) or Yeast Autolysate Supplement (FD027) may be added.

Gelling

Firm, comparable with 1.0% Agar gel.

Colour and Clarity

Basal medium forms light yellow coloured clear to slightly opalescent gel. With addition of haemoglobin (FD022), chocolate brown coloured opaque gel forms in petri plates.

Reaction

Reaction of 3.6% 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 40-48 hours in presence of 5-10% Carbon dioxide (CO₂) and 70% humidity with added Haemoglobin (FD022) and GC Supplement (FD021). Haemophilus influenzae (19418) Neisseria meningitidis (13090)* Neisseria gonorrhoeae (19424)* Streptococcus pneumoniae (6303) Streptococcus pyogenes (19615) 10³-10⁴ CFU/g 10-10⁴ good-luxuriant >50%

Key : * = with antibiotic supplement(s).

References :


Prepared from GMO free Vegetable proteins replacing Animal based peptones. Freedom from BSE/TSE worries.