Brain Heart Infusion Agar, HiVeg™ (with 1% Agar)  MV211 / MV211A

Brain Heart Infusion Agar, HiVeg / (with 1% Agar) is a solid medium recommended for the cultivation of fastidious pathogenic bacteria, yeasts and moulds.

**Composition**:

<table>
<thead>
<tr>
<th>Ingredients</th>
<th>MV211 Grams/Litre</th>
<th>MV211A Grams/Litre</th>
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</thead>
<tbody>
<tr>
<td>HiVeg special infusion</td>
<td>7.50</td>
<td>7.50</td>
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<tr>
<td>HiVeg infusion</td>
<td>10.00</td>
<td>10.00</td>
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<tr>
<td>HiVeg peptone No. 3</td>
<td>10.00</td>
<td>10.00</td>
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<tr>
<td>Dextrose</td>
<td>2.00</td>
<td>2.00</td>
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<tr>
<td>Sodium chloride</td>
<td>5.00</td>
<td>5.00</td>
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<tr>
<td>Disodium phosphate</td>
<td>2.50</td>
<td>2.50</td>
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<tr>
<td>Agar</td>
<td>15.00</td>
<td>10.00</td>
</tr>
</tbody>
</table>

**Recommended for**: The cultivation of fastidious pathogenic bacteria, yeasts and moulds.

**Directions**: Suspend 52.0 grams of MV211 or 47.0 grams of MV211A 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. Mix well before pouring. If desired, 20 units Penicillin and 40 µg Streptomycin per ml of medium may be added to make the medium selective for fungi.

**Principle and Interpretation**: These media are prepared by completely replacing animal based peptones with vegetable peptones which makes the media free of BSE/TSE risks. These are highly nutritious media that can support luxuriant growth of a wide variety of microorganisms. These like the conventional media, can be further enriched by the addition of blood or rendered selective by adding different antibiotics (1, 2). These media are general purpose culture media used for primary isolation of aerobic bacteria from clinical specimens. Addition of 50 mg per litre of Chloramphenicol or 40 mg per litre of Streptomycin or mixture of 50 mg Gentamicin and 50 mg Chloramphenicol along with 5-10% sterile defibrinated blood is often recommended for infection of bacteria and isolation of pathogenic systemic fungi. A mixture of Cycloheximide (0.5 g per litre) and Chloramphenicol (0.05 g per litre) is also used for selective isolation of pathogenic fungi (incubation at 25-30°C for 1-2 weeks) (3). Some fungi may be inhibited in this medium with 10% sheep blood, Gentamicin and Chloramphenicol (4, 5, 6).

HiVeg special infusion, HiVeg infusion, HiVeg peptone No.3 and dextrose provides source of nitrogen, carbon, vitamins and chloride maintains osmotic equilibrium. Phosphate provide good buffering action in these media. When defibrinated sheep blood is added to the basal medium, it provides essential growth factors for the more fastidious fungal organisms.

**Quality Control**: Appearance of Powder
Light yellow coloured may have slightly greenish tinge, homogeneous, free flowing powder.

**Gelling**
Firm, comparable with 1.5% of MV211 or 1.0% of MV211A Agar gel.

**Colour and Clarity**
Light amber coloured, clear to slightly opalescent gel. With addition of 5% v/v sterile defibrinated blood, cherry red coloured opaque gel forms in petri plates.

**Reaction**
Reaction of 5.2% w/v of MV211 or 4.7% w/v of MV211A aqueous solution is pH 7.4 ± 0.2 at 25°C.

**Cultural Response**
Cultural characteristics observed after an incubation at 37°C for 18-24 hours.

**References**