77148 / 89788 / 08482 Differentiation Disks X Factor / V Factor / X + V Factors

Use for the presumptive identification of *Haemophilus* species on the basis of their requirements for X or V growth factor or both.

Member of the genus *Haemophilus* require hemin (X factor) and/or nicotinamid-adenin-dinucleotid (V-factor). Together with the X factor (77148) and the V factor (89788) the need for either one or both factors provides the main means of differentiation of these organisms. *Haemophilus* species requiring both X and V factors exhibit growth only in the vicinity of the X + V factor discs (Prod No 08482).

**Composition:**

One package contains 50 test discs. Sterile filter paper discs (diameter 6mm):
- impregnated with hemin and nicotinamide adenine dinucleotide (X + V factor discs; Prod No 08482).
- impregnated with hemin (X factor discs; Prod No 77148).
- impregnated with nicotinamide adenine dinucleotide (V factor discs; Prod No 89788).

**Directions:**

Inoculate the surface of a Blood Agar (70133) plate or Brain Heart Infusion Agar (70138) plate with the test organisms by streaking or surface spreading. Aseptically, place the X and V factor discs on the plate. Incubate the plates at 35-37°C for 24-48 hours.

**Recommended Disc Positions on the Agar Plate:**

<table>
<thead>
<tr>
<th>Disc Type</th>
<th>Position</th>
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</thead>
<tbody>
<tr>
<td>X factor disc</td>
<td>12 O’clock</td>
</tr>
<tr>
<td>V factor disc</td>
<td>4 O’clock</td>
</tr>
<tr>
<td>X + V factor disc</td>
<td>8 O’clock</td>
</tr>
</tbody>
</table>

Observe the growth in the neighborhood of the disc. The test organism requiring X factor grows only in the vicinities of X discs, those who require V factor grows only in the vicinities of V discs and those who require V and X factor grows only in the vicinities of X + V discs.

**Note:**

*Use known strains of Haemophilus influenza strains to monitor the performance of the differentiation discs and the medium.*  
*Do not use heavy suspension of the test organisms as X- or V-factor carryover from the primary growth medium may take place.*

**Precautions and Disclaimer**

This product is for R&D use only, not for drug, household, or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.