Our Modified Diamond Trichomonas medium is used for the selective detection and cultivation of *Trichomonas* species.

Diamond’s medium was developed by Diamond in 1957; the CDC modified the formulation in 1980 by replacing sheep serum with horse serum, increasing the concentration of maltose, cysteine, and ascorbic acid, and adding antibiotics to the medium to suppress the growth of bacteria and fungi. This medium through numerous studies has been shown to be superior for the isolation of *Trichomonas* species.

Peptones and extracts provide nitrogen, vitamins, amino acids, and minerals essential for growth of *Trichomonas*. The presence of agar and cysteine results in reduced oxygen tension which is beneficial for the growth of *Trichomonas*. Amphotericin, gentamicin and vancomycin are selective agents which collectively suppress the growth of a wide range of urogenital flora thereby allowing *Trichomonas* to flourish.

**Formula per Litre of Medium**

Pancreatic Digest of Casein ...................... 20.0 g  
Yeast Extract .......................................... 10.0 g  
Maltose .................................................. 15.0 g  
Potassium phosphate dibasic .................... 0.8 g  
Potassium phosphate monobasic .................. 0.8 g  
Cysteine .................................................. 1.0 g  
Ascorbic acid ........................................... 0.2 g  
Agar .......................................................... 0.5 g  
Amphotericin B ........................................ 10.0 mg  
Gentamicin .............................................. 20.0 mg  
Vancomycin ............................................. 20.0 mg  
Horse Serum .......................................... 100 mL  

pH 6.0 ± 0.2

**Recommended Procedure**

1. Warm medium to 35°C in an incubator prior to inoculation.
2. Inoculate the specimen as soon as possible. If a liquid specimen is received, inoculate several drops into the medium. If the specimen is contained on a swab, swirl the swab in the medium and cut off the protruding top portion of the swab.
3. Cap loosely and incubate the tubes at 35 to 37°C.
4. Examine tubes daily for up to 5 days before discarding.

**Interpretation of Results**

Cultures should be examined for growth daily for up to 5 days. A drop of the medium from the lower portion of the tube should be examined by wet mount for the presence of motile trophozoites. If the examination under low power magnification results in observing motile trophozoites the test is considered positive for *Trichomonas*. If no growth is observed after 5 days the test can be considered negative and the tubes discarded.

- *Trichomonas vaginalis does not survive for very long in clinical specimens and therefore should be culture as soon as possible*
- *Urine specimens should be concentrated by centrifugation and the sediment should be inoculated into the medium and examined microscopically*
Quality Control

After checking the medium for correct pH, colour, depth, and sterility, the following organisms are used to determine the performance of the completed medium after 72 hours of incubation.

<table>
<thead>
<tr>
<th>Organism</th>
<th>Expected Results</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Trichomonas vaginalis</em> ATCC 30001</td>
<td>Growth</td>
</tr>
<tr>
<td><em>Candida albicans</em> ATCC 27853</td>
<td>Inhibition</td>
</tr>
<tr>
<td><em>Escherichia coli</em> ATCC 25922</td>
<td>Inhibition</td>
</tr>
<tr>
<td><em>Staphylococcus aureus</em> ATCC 25923</td>
<td>Inhibition</td>
</tr>
</tbody>
</table>

Storage and Shelf Life

Our Trichomonas medium should be stored in an upright position at 4 to 8°C. Under these conditions the medium has a shelf life of 16 weeks from the date of manufacture.

Ordering Information

<table>
<thead>
<tr>
<th>Cat#</th>
<th>Description</th>
<th>Format</th>
</tr>
</thead>
<tbody>
<tr>
<td>TT77-7.5</td>
<td>Trichomonas Medium 7.5 mL [Modified Diamond] pH 6.0</td>
<td>10/pkg</td>
</tr>
</tbody>
</table>

References