

## Trichomonas HiVeg™ Broth Base, Kupferberg

MV305

### Intended Use:

Recommended for selective isolation and cultivation of *Trichomonas* species.

### Composition\*\*

Ingredients	g / L
HiVeg™ hydrolysate	20.000
Maltose	1.000
L-Cysteine hydrochloride	1.500
Methylene blue	0.003
Agar	1.000
Final pH ( at 25°C)	6.0±0.2

\*\*Formula adjusted, standardized to suit performance parameters

### Directions

Suspend 23.5 grams in 950 ml purified/distilled water. Heat to boiling to dissolve the medium completely. Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes. Cool to 45-50°C and aseptically add 50 ml sterile bovine or human serum and rehydrated contents of two vials of SP Selective Supplement I (FD099) or 1 mg chloramphenicol per ml of medium. Mix well and dispense into sterile tubes or flasks as desired.

### Principle And Interpretation

The protozoa that parasitize the intestine and urogenital systems of humans belong to four groups: flagellates, amoeboids, sporozoans and ciliates. *Trichomonas* belongs to flagellate group of protozoa. *Trichomonas hominis* is a non-pathogenic protozoan whereas *Trichomonas vaginalis* is a frequent cause of vaginitis (1). Kupferberg Trichomonas Broth Base, used for the isolation and cultivation of *Trichomonas* species, was originally formulated by Kupferberg et al (2). Although wet mount examination of infected material are as efficient as cultures in revealing infections, current evidence suggests that cultivation methods are superior (3,4,5). Superiority of the culture method was earlier demonstrated by Williams (6) and Kean and Day (7). The greater accuracy of the culture method was demonstrated by Kupferberg (8) and it was also observed that the efficiency of therapy for these infections could be ascertained by using negative cultures. The culture media can be made selective for the growth of *Trichomonas* by the external addition of antibiotics. These antibiotics make the media inhibitory to the accompanying bacterial flora (7,8,9,10). Trichomonas HiVeg™ Broth Base, Kupferberg is prepared by using vegetable peptones in place of animal based peptones which make the media free of BSE/TSE risks. The medium contains HiVeg™ hydrolysate, which provides the nitrogenous substances required for growth. Maltose acts as energy source. The selective agents Streptomycin or chloramphenicol and penicillin are inhibitory to accompanying gram-positive and gram-negative bacteria but not to *Trichomonas* species.

### Type of specimen

Clinical samples - vaginal and urethral secretions (women), anterior urethral or prostatic secretions (men)

### Specimen Collection and Handling:

After use, contaminated materials must be sterilized by autoclaving before discarding.

### Warning and Precautions :

Read the label before opening the container. Wear protective gloves/protective clothing/eye protection/ face protection. Follow good microbiological lab practices while handling specimens and culture. Standard precautions as per established guidelines should be followed while handling specimens. Safety guidelines may be referred in individual safety data sheets.

### Limitations :

1. Further wet mount examination of infected material should be done.

### Performance and Evaluation

Performance of the medium is expected when used as per the direction on the label within the expiry period when stored at recommended temperature.

## Quality Control

### Appearance

Cream to yellow homogeneous free flowing powder

### Colour and Clarity of prepared medium

Light amber coloured, slightly opalescent, viscous solution with upper 10% or less medium green coloured on standing.

### Reaction

Reaction of 2.35% w/v aqueous solution at 25°C. pH : 6.0±0.2

### pH

5.80-6.20

### Cultural Response

Cultural characteristics observed, with added Trichomonas Selective Supplement (FD099), after an incubation at 30°C for upto 7 days (*T.vaginalis* and *P.hominis* incubated anaerobically).

Organism	Growth
<i>Pentatrichomonas hominis</i> ATCC 30000	luxuriant
<i>Trichomonas vaginalis</i> ATCC 30001	luxuriant
<i>Trichophyton gallinae</i> ATCC 22243	luxuriant
<i>Trichomonas tenax</i> ATCC 30207	luxuriant

## Storage and Shelf Life

Store between 10-30°C in a tightly closed container and the prepared medium at 2-8°C. Use before expiry date on the label. On opening, product should be properly stored dry, after tightly capping the bottle in order to prevent lump formation due to the hygroscopic nature of the product. Improper storage of the product may lead to lump formation. Store in dry ventilated area protected from extremes of temperature and sources of ignition. Seal the container tightly after use. Product performance is best if used within stated expiry period.

## Disposal

User must ensure safe disposal by autoclaving and/or incineration of used or unusable preparations of this product. Follow established laboratory procedures in disposing of infectious materials and material that comes into contact with sample must be decontaminated and disposed of in accordance with current laboratory techniques (11,12).

## Reference

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