



## Kupferberg Trichomonas Broth Base (Trichomonas Broth Base, Kupferberg)

M305

Kupferberg Trichomonas Broth with added enrichments and antibiotics is used for selective isolation and cultivation of *Trichomonas* species.

### Composition\*\*

Ingredients	Gms / Litre
Casein enzymic 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 distilled water. Heat to boiling to dissolve the medium completely. Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes. Cool to 50-55°C and aseptically add 50 ml sterile beef or human serum and rehydrated contents of 2 vials of Trichomonas Selective Supplement I (FD099) or 1 mg chloramphenicol per ml of medium. Mix well and dispense 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 (6, 8-10).

The medium contains casein enzymic 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.

### 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

M305: 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 below 30°C in tightly closed container and prepared medium at 2-8°C. Use before expiry period on the label

## Reference

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