Kupferberg Trichomonas Broth Base (Trichomonas Broth Base, Kupferberg) M305

Intended Use:

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

Composition**

Ingredients	Gms / Litre
Tryptone	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 Trichomonas 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 (6, 8-10).

The medium contains Tryptone, 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

For clinical samples follow appropriate techniques for handling specimens as per established guidelines (4,5).
After use, contaminated materials must be sterilized by autoclaving before discarding.

Warning and Precautions :

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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
Pentatrichomonas hominis ATCC 30000	luxuriant
Trichomonas vaginalis ATCC 30001	luxuriant
Trichophyton gallinae ATCC 22243	luxuriant
Trichomonas tenax ATCC 30207	luxuriant

Reference

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