TM 1212 – TRICHOMONAS BROTH BASE, KUPFERBERG (KUPFERBERG TRICHOMONAS BROTH BASE)

INTENDED USE

For cultivation and selective isolation of *Trichomonas* species.

PRODUCT SUMMARY AND EXPLANATION

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 nonpathogenic protozoan whereas *Trichomonas vaginalis* is a frequent cause of vaginitis. Kupferberg Trichomonas Broth Base, used for the isolation and cultivation of Trichomonas species, was originally formulated by Kupferberg et al. Although wet mount examination of infected material as efficient as cultures in revealing infections, current evidence suggests that cultivation methods are superior. Superiority of the culture method was earlier demonstrated by Williams and Kean and Day. The greater accuracy of the culture method was demonstrated by Kupferberg 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.

COMPOSITION

Ingredients	Gms / Ltr
Tryptone	20.000
Maltose	1.000
L-Cysteine hydrochloride	1.500
Methylene blue	0.003
Agar	1.000

PRINCIPLE

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.

INSTRUCTION FOR USE

- Dissolve 23.5 grams in 950 ml purified/distilled water.
- Heat to boiling to dissolve the medium completely.
- Sterilize by autoclaving at 15 psi 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 or 1 mg chloramphenicol per ml of medium.
- Mix well and dispense into sterile tubes or flasks as desired.

QUALITY CONTROL SPECIFICATIONS

Appearance of Powder : Cream to yellow homogeneous free flowing powder.

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

pH (at 25°C) : 6.0±0.2

INTERPRETATION

Cultural characteristics observed after incubation with added *Trichomonas* supplement.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Incubation Temperature	Incubation Period
Pentatrichomonas hominis	30000	50-100	Luxuriant	30°C	7 Days
Trichomonas vaginalis	30001	50-100	Luxuriant	30°C	7 Days
Trichophyton gallinae	22243	50-100	Luxuriant	30°C	7 Days
Trichomonas tenax	30207	50-100	Luxuriant	30°C	7 Days

PACKAGING:

In pack size of 500 gm bottles.

STORAGE

Dehydrated powder, hygroscopic in nature, store in a dry place, in tightly-sealed containers between 25-30°C and protect from direct sunlight. Under optimal conditions, the medium has a shelf life of 4 years. When the container is opened for the first time, note the time and date on the label space provided on the container. After the desired amount of medium has been taken out replace the cap tightly to protect from hydration.

Product Deterioration: Do not use if they show evidence of microbial contamination, discoloration, drying or any other signs of deterioration.

DISPOSAL

After use, prepared plates, specimen/sample containers and other contaminated materials must be sterilized before discarding.

REFERENCES

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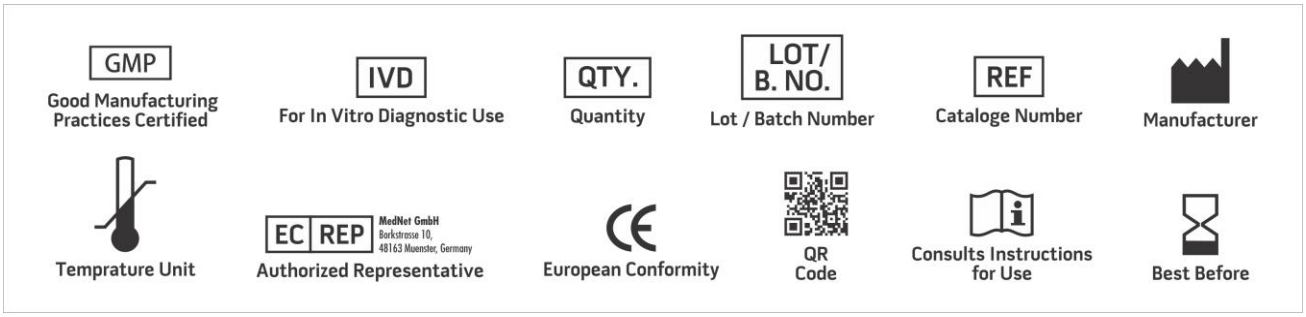

NOTE: Please consult the Material Safety Data Sheet for information regarding hazards and safe handling Practices.

***For Lab Use Only**

Revision: 08 Nov., 2019