Trichomonas Broth (Kupferberg)

Cat. 2029

For selective isolation and cultivation of Trichomonas species.

Practical information

Aplications	Categories
Growth	Trichomonas
Selective isolation	Trichomonas

Industry: Clinical

Principles and uses

Kupferberg Trichomonas Broth is used for the isolation and cultivation of Trichomonas species, and was originally formulated by Kupferberg.

Trichomonas belongs to flagellate group of protozoa, organisms that parasitize the intestine and urogenital systems of humans. Trichomonas hominis is a non-pathogenic protozoan whereas Trichomonas vaginalis is a frequent cause of vaginitis. Despite wet mount examination of infected material is as efficient as cultures in revealing infections, current evidence suggests that cultivation methods are superior, which was earlier stated by Williams and Kean and Day. Kupferberg demonstrated the greater accuracy of the culture method, in addition, to observe 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 which make the media inhibitory to the accompanying bacterial flora.

The Kupferberg Trichomonas Broth medium contains peptones, which provide the nitrogenous substances required for growth. Maltose acts as energy source. The selective agent chloramphenicol is inhibitory to accompanying Gram-positive and Gram-negative bacteria but not to Trichomonas species.

Formula in g/L

Bacteriological agar	1	Casein peptone	10
Chloramphenicol	0,1	Cysteine hydrochloride	1,5
Maltose	1	Meat peptone	10
Methylene blue	0,003		

Typical formula g/L * Adjusted and/or supplemented as required to meet performance criteria.

Preparation

Suspend 23,6 grams of the medium in 950 ml of distilled water. Mix well and dissolve by heating with frequent agitation. Boil for one minute until complete dissolution. Dispense into appropriate containers and sterilize in autoclave at 118 ºC for 15 minutes. Cool to 50-45 ºC, mix well aseptically add 50 ml of sterile calf serum or human serum.

Instructions for use

- Inoculate specimens suspected of containing Trichomonas organisms into the broth medium.
- Incubate the tubes at 30°C in for 7 days.

Quality control

Solubility	Appareance	Color of the dehydrated medium	Color of the prepared medium	Final pH (25ºC)
Sin restos	Polvo fino	Cream	Light amber with a green halo at the top	6,0 ± 0,2

Microbiological test

The microbiological test should be carried out by the end-user laboratory.

Storage

Temp. Min.:2 ºC
Temp. Max.:25 ºC

Bibliography

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