

TM 726 – ENTAMOEBA MEDIUM

INTENDED USE

For cultivation of *Entamoeba histolytica*.

PRODUCT SUMMARY AND EXPLANATION

Amoebiasis occurs throughout all areas of the world, the causative agent of which is *Entamoeba histolytica*, the only amoeba pathogenic for humans. In nature, the organism exists in the cyst form. It enters the body through contaminated food or water. The organism passes through the stomach as cyst and the trophozoite amoebas emerge in the intestine. *E. histolytica* destroys the tissue of the large intestine, causing lesions, deep ulcers and diarrhea.

Entamoeba Medium formulated by Cleveland and Sanders and Cleveland and Collier, is used for the cultivation of *E. histolytica*. This medium is highly specific for *E. histolytica*, which grows luxuriantly on this medium. Other intestinal amoebae do not grow readily on this medium. The technique of overlaying the medium with fresh sterile horse serum-saline mixture, as reported by Cleveland and Collier, was reported to be the best method of isolation of *E. histolytica*.

COMPOSITION

Ingredients	Gms / Ltr
Liver, infusion from	272.000
Proteose peptone	5.500
Sodium alpha-glycerophosphate	3.000
Sodium chloride	2.700
Agar	11.000

PRINCIPLE

The medium consists of Proteose peptone and Liver infusion from which provide amino acids and other nitrogenous substances that support growth of *E. histolytica*. Sodium chloride maintains the osmotic balance of the medium and sodium alpha-glycerophosphate acts as a phosphorous source.

INSTRUCTION FOR USE

- Dissolve 33.0 grams in 1000 ml purified / distilled water.
- Heat to boiling to dissolve the medium completely.
- Distribute in tubes and sterilize by autoclaving at 15 psi pressure (121°C) for 15 minutes. Cool to 45-50°C.
- Allow tubes to solidify in a slanted position. Cover about half of the slant with fresh sterile horse serum-saline mixture (1:6) and add a 5 mm loopful of rice powder, which has been sterilized in an oven at 160°C for one hour.

QUALITY CONTROL SPECIFICATIONS

- Appearance of Powder** : Light yellow to brownish yellow homogeneous free flowing powder.
Appearance of prepared medium : Dark amber coloured, slightly opalescent gel forms in tubes as slants.
pH (at 25°C) : 7.0 ± 0.2

INTERPRETATION

Cultural characteristics observed under anaerobic condition after incubation.



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

***For Lab Use Only**
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