

Technical Data

Modified CPLM Medium Base (Trichomonas Modified CPLM Medium Base)

M460

Intended Use:

With addition of horse serum and antibiotics is recommended for cultivation of *Trichomonas* species.

Composition**

Ingredients	g/ L
Peptone	32.000
HL digest #	20.000
Maltose	1.600
L-Cystine hydrochloride	2.400
Ringer's solution ¼ th strength (qs)	1000.0(QS)
Final pH (at 25°C)	6.0±0.2

^{**}Formula adjusted, standardized to suit performance parameters

Directions

Suspend 56.0 grams in 900 ml purified/distilled water. Heat to dissolve the medium completely. Distribute in bottles in 90 ml amounts and sterilize by autoclaving at Δ 115°C for 10 minutes. Cool to 45-50°C and aseptically add the following (per 90 ml of medium).

Sterile inactivated Horse Serum
Sterile Penicillin Streptomycin Solution
Sterile Nystatin Solution
I ml

Mix thoroughly and distribute in suitable aliquots with sterile precautions.

Penicillin Streptomycin solution

Penicillin 1 x 10⁵ units

Streptomycin 0.1 g Sterile distilled water 10 ml

Nystatin Solution

Nystatin 5×10^4 units Sterile distilled water 10 ml

The addition of antibiotics is not necessary for routine subcultures but is essential for clinical diagnostic cultures and for isolating axenic cultures. Nystatin can be omitted unless yeast or fungal contaminants are suspected.

Principle And Interpretation

Trichomonas is a protozoan, similar to bacteria. Trichomonas vaginalis is a causative agent of trichomonalis, the most common protozoan infection in humans. It can infect the vagina and urethra in women, and sometimes the prostate gland in men. The duration of survival of T. vaginalis in transport medium is fairly limited. The organisms die rapidly when dried on a swab; an alternative approach is to place the loaded swab promptly into a tube of Trichomonas Culture Medium supplemented with horse serum, penicillin and streptomycin. Media for cultivation of T.vaginalis basically provide essential salts, nutrients, reducing agents and antibiotics to inhibit bacterial growth in the absence or in low concentration of oxygen.

Johnson and Trussell (1) recommended CPLM (Cystine-Peptone-Liver infusion-Maltose) Medium. This medium was further modified without agar and methylene blue (2). Under strictly anaerobic conditions, this medium supports growth from a single protozoan. Under aerobic conditions, massive inocula are required. *T.vaginalis* is an anaerobe and contains no catalase.

Peptone and HL digest in the medium provide nitrogenous compounds and other essential nutrients. L-cystine hydrochloride acts as a reducing agent. Cystine is not essential when cultures are incubated anaerobically but it assists the maintenance of anaerobiosis. The antibiotics inhibit bacterial growth and supports growth from a single protozoon under strictly anaerobic conditions.

[#] Equivalent to Liver digest

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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 (3,4).

After use, contaminated materials must be sterilized by autoclaving before discarding.

Warning and Precautions:

In Vitro diagnostic Use only. For professional use only. Read the label before opening the container. Wear protective gloves/protective clothing/eye protection/face protection. Follow good microbiological lab practices while handling specimens and culture. Standard precautions as per established guidelines should be followed while handling clinical specimens. Safety guidelines may be referred in individual safety data sheets.

Limitations:

1. Further wet mount examination of infected material should be done.

Performance and Evaluation

Performance of the medium is expected when used as per the direction on the label within the expiry period when stored at recommended temperature.

Quality Control

Appearance

Cream to yellow homogeneous free flowing powder

Colour and Clarity of prepared medium

Brownish yellow coloured clear solution without any precipitate

Reaction

Reaction of 5.6% w/v aqueous solution at 25°C. pH: 6.0±0.2

pН

5.80-6.20

Cultural Response

Cultural characteristics observed after an incubation at 35-37°C for upto 4 days.

OrganismGrowthTrichomonas vaginalisgood-luxuriant

ATCC 30001

Storage and Shelf Life

Store between 10-30°C in a tightly closed container and the prepared medium at 15-30°C. Use before expiry date on the label. On opening, product should be properly stored dry, after tightly capping the bottle in order to prevent lump formation due to the hygroscopic nature of the product. Improper storage of the product may lead to lump formation. Store in dry ventilated area protected from extremes of temperature and sources of ignition. Seal the container tightly after use. Product performance is best if used within stated expiry period.

Disposal

User must ensure safe disposal by autoclaving and/or incineration of used or unusable preparations of this product. Follow established laboratory procedures in disposing of infectious materials and material that comes into contact with clinical sample must be decontaminated and disposed of in accordance with current laboratory techniques (3,4).

Reference

- 1. Johnson G. and Trussell R. E., 1943, Proc. Soc. Exp. Biol., 54:245.
- 2. Mackie and McCartneys Practical Medical Microbiology, 1989, 13th Ed., Vol. 2, Churchill Livingstone, London.
- 3. Isenberg, H.D. Clinical Microbiology Procedures Handbook 2nd Edition.
- 4. Jorgensen, J.H., Pfaller, M.A., Carroll, K.C., Funke, G., Landry, M.L., Richter, S.S and Warnock., D.W. (2015) Manual of Clinical Microbiology, 11th Edition. Vol. 1.

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HiMedia Laboratories Pvt. Limited, Plot No.C-40, Road No.21Y, MIDC, Wagle Industrial Area, Thane (W) -400604, MS, India



In vitro diagnostic medical device



Storage temperature



CEpartner4U, Esdoornlaan 13, 3951DB Maarn, NL www.cepartner4u.eu





Do not use if package is damaged

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