

Puritan CT Broth Transport Medium

INTENDED USE

Puritan CT Transport Medium is a selective enrichment medium used for the isolation and cultivation of *Candida spp* and *Trichomonas spp*.

SUMMARY AND EXPLANATION

Trichomoniasis is a very common sexually transmitted disease that is caused by the protozoan parasite *Trichomonas vaginalis*. *T. vaginalis* is most frequently identified by microscopic examination of vaginal fluid; however, this method has a sensitivity of only about 60% compared to culture.¹ CT Broth allows for the isolation and cultivation of *Candida spp* and *Trichomonas spp* in vaginal specimens. The casein peptone, L-cysteine, beef extract and yeast extract serve as sources of amino acids, nitrogen, sulfur, carbon, vitamins and trace ingredients. Maltose is an energy source for the metabolism of *Candida* and *Trichomonas*. Chloramphenicol is a broad spectrum antibiotic which inhibits a wide range of gram-positive and gram-negative bacteria. Horse serum is added to provide growth factors required by *Trichomonas*.²

REAGENTS

Pancreatic Digest of Casein	Agar
Beef Extract	Chloramphenicol
Yeast Extract	Methylene Blue
L-Cysteine hydrochloride	Horse serum
Maltose	Demineralized Water

pH 6.0 ± 0.2 @ 25°C

PRECAUTIONS

For *in vitro* Diagnostics Use

- For single use only.
- Clinical specimens are considered biohazard and must be handled in manner to protect laboratory personnel.
- To be used by trained and qualified personnel using aseptic technique.
- Clinical samples may contain human pathogens including hepatitis virus and Human Immunodeficiency Virus. Institutional and universally recognized guidelines should be followed when handling items contaminated with blood and other body fluids.³
- Specimen vials and other contaminated materials must be sterilized by autoclave before discarding.
- Do not use if the vial is damaged or detected evidence of contamination, discoloration or leakage.
- Do not ingest the medium.
- Do not use beyond expiry date.

STORAGE

For optimum performance, store at 2-25°C. Avoid freezing and overheating.^{4, 5}

MATERIALS SUPPLIED

Puritan CT Broth Transport Medium is available in product configurations indicated in the table below:

Item Number	Product Descriptions	Pack Size
CT-200	Blue polypropylene screw-cap tube with 2 mL of CT Broth Medium.	50 / Box
CT-500	Blue polypropylene screw-cap tube with 5 mL of CT Broth Medium.	50 / Box

SPECIMEN COLLECTION AND HANDLING

Specimens suitable for culture may be handled using various techniques. For detailed guidance, refer to appropriate references.^{6, 7} Specimens should be obtained before antimicrobial agents have been administered.

LABORATORY SPECIMEN PROCESSING

CT Broth Collected Sample

1. Incubate inoculated CT Broth transport medium at $35 \pm 2^\circ\text{C}$.
2. After 48 hours and again after 5 days of incubation, prepare a wet mount from the broth and examine microscopically under low power for the presence and motility of flagellate protozoans.
3. A culture for *Candida spp* can be performed by using an automation platform or manual direct plating on a suitable culture medium after 3-7 days of incubation.

QUALITY CONTROL

All batches of Puritan CT Broth Transport Medium are tested prior to release for pH and further evaluated for their ability to promote growth of *Candida spp* and *Trichomonas spp* and suppress enterococci and coliforms over predefined time periods. All bacterial test isolates and testing procedures were established using criteria outlined in the Clinical and Laboratory Standards Institute's M22-A3 document and dehydrated media manufacturer recommendations where applicable.^{2, 8}

Control	Incubation	Results
<i>Candida albicans</i> ATCC 10231	Aerobic, 18-24 hr @ 35-37°C	Growth
<i>Staphylococcus aureus</i> ATCC 25923	Aerobic, 18-24 hr @ 35-37°C	Inhibition
<i>Trichomonas vaginalis</i> ATCC 30001	Aerobic, 48 hr @ 35-37°C	Growth

LIMITATIONS

Definitive identification of *Candida spp* and *Trichomonas spp* requires additional and/or serological tests. Refer to appropriate reference standards for further instructions.^{6, 7} The medium selectivity may vary depending on the specimen conditions and the cell population of the specimen.

REFERENCES

1. Rivers, C.A., J. R. Schwebke. 2008. Viability of *Trichomonas vaginalis* in Copan Universal Transport Medium and eSwab Transport Medium. *Journal of Clinical Microbiology*. 46(9): 3134-3135.
2. Zimbro M.J., D.A. Power. 2003. *Difco & BBL Manual: Manual of Microbiological Culture Media*. Becton, Dickinson, and Company. Sparks, MD.
3. Directive 2000/54/EC of the European Parliament and of the Council of 18 September 2000 on the protection of workers from risk related exposure to biological agents at work. *Official Journal of the European Communities*. L 262/21-45.
4. Versalovic, J., K.C. Carroll, G. Funke, J.H. Jorgensen, M.L. Landry, D.W. Warnock. 2011. *Manual of Clinical Microbiology*, 10th ed. American Society for Microbiology. Washington, DC.
5. Miller, J.M. 1996. *A guide to specimen management in clinical microbiology*. American Society for Microbiology. Washington, DC.
6. Forbes, B.A., D.F. Sahm, A.S. Weissfeld. 2007. *Diagnostic Microbiology* 12th ed. Mosby. St. Louis, MO.
7. Murray, P.R., E.G. Baron, J.H. Jorgensen, M.A. Tenover, R.H. Tenover. 2003. *Manual of Clinical Microbiology*, 8th ed. American Society for Microbiology, Washington, DC.
8. CLSI. *Quality Control for Commercially Prepared Microbiological Culture Media; Approved Standard-Third Edition*. CLSI document M22-A3. Wayne, PA. Clinical and Laboratory Standards Institute; 2004.



207-876-3311 • puritanmedproducts.com
sales@puritanmedproducts.com
Puritan Medical Products Co. LLC
31 School Street, Guilford, Maine 04443-0149 USA
ISO 9001:2008 ISO 13485:2003 CE

