

Product Insert

ORAL TREPONEME ENRICHMENT BROTH (OTEB)

Products

AS-603 Oral Treponeme Enrichment Broth (OTEB)

10 Tubes / pkg

Intended Use

Oral Treponeme Enrichment Broth (OTEB) is an enriched nonselective medium used for the isolation, cultivation, and maintenance of *Treponema spp.* from clinical specimens.

Summary

OTEB is a complex peptone yeast extract medium containing volatile fatty acids and calf serum. Volatile fatty acids and serum are necessary growth factors for the recovery of *Treponemes* from clinical specimens. A variety of sugars have been added as a source of carbohydrates. This medium is prepared, dispensed, and packaged under oxygen-free conditions to prevent the formation of oxidized products prior to use.

Formulation*

Proteose Peptone	5.00	g
Heart Infusion Broth	5.00	g
Yeast Extract	5.00	g
Potassium Phosphate Dibasic	2.00	g
Sodium Chloride	5.00	g
Magnesium Sulfate Heptahydrate	0.20	g
Glacial Acetic Acid	1.60	mL
Propionic Acid	0.60	mL
Butyric Acid	0.40	mL
Valeric Acid	0.10	mL
Isovaleric Acid	0.10	mL
Isobutyric Acid	0.10	mL
Methylbutyric Acid	0.10	mL
Vitamin K ₁ (1.0% solution)	1.00	mL
L-Cysteine Hydrochloride (25.0% solution)	2.00	mL
Calf Serum	100.00	mL
Sugar Stock Solution	100.00	mL
DI Water	800.00	mL

Sugar Stock Solution

Glucose	8.00	g
Fructose	8.00	g
Sucrose	8.00	g
Maltose	8.00	g
Ribose	8.00	g
Xylose	8.00	g
Pectin	8.00	g
Soluble Starch	8.00	g
Sodium Pyruvate	8.00	g
Thiamine Pyrophosphate	750.00	µg
DI Water	1.00	L

Final pH: 7.0 ± 0.2 at 25° C

Final volume: 7.0 mL ± 0.7 mL

*Approximate formula. Adjusted and/or supplemented as required to meet performance criteria.

Precautions

For *IN VITRO DIAGNOSTIC USE* only. Utilize approved biohazard precautions and aseptic technique when using this product. This product is for use only by properly-trained and qualified personnel. Sterilize all biohazard waste prior to disposal.

Storage and Shelf Life

Storage: Upon receipt, store at room temperature in original package until used. Avoid overheating or freezing. Do not use media if there are signs of deterioration (discoloration due to oxidation of media) or contamination. The expiration date applies to the product in its original packaging and stored as directed. Do not use product past the expiration date shown on the label.

Shelf Life: 6 months from date of manufacture.

Procedure

Specimen Collection: Specimens for anaerobic culture should be protected from oxygen during collection, transportation, and processing. Consult appropriate references for detailed instructions concerning collection and transportation of anaerobes.

Methods for Use: Inoculate OTEB directly with a clinical specimen. Inoculated tubes should be immediately placed into an anaerobic atmosphere and incubated at 35-37°C for 48 – 96 hours. Extended periods of incubation, 1 – 2 weeks, may be required to recover some *Treponema* species. Detailed instructions for processing anaerobic cultures can be found in the listed references.

Materials Required, But Not Provided

Standard microbiological supplies and equipment such as loops, saline blanks, slides, staining supplies, microscope, incinerator / autoclave, incubators, anaerobic chamber / anaerobic jars, disinfectant, other culture media, and serological / biochemical reagents.

Interpretation of Results

If used properly, OTEB will support good growth of most *Treponema* species found in clinical specimens.

Limitations

OTEB will not provide complete information for identification of bacterial isolates. Additional test procedures and media are required for complete identification. Consult reference materials for additional information.

Quality Control

The following organisms are routinely used for quality control testing at Anaerobe Systems.

Organism Tested	ATCC #	Results	Time
<i>Treponema denticola</i>	33521	Growth	72 – 96 hrs
<i>Treponema phagedenis</i>	27087	Growth	72 – 96 hrs
<i>Bacteroides fragilis</i>	25285	Growth	24 hrs
<i>Bacteroides vulgatus</i>	8482	Growth	24 hrs
<i>Prevotella melaninogenica</i>	25845	Growth	24 – 48 hrs
<i>Fusobacterium necrophorum</i>	25286	Growth	24 hrs
<i>Fusobacterium nucleatum</i>	25586	Growth	24 hrs
<i>Clostridium perfringens</i>	13124	Growth	24 hrs
<i>Peptostreptococcus anaerobius</i>	27337	Growth	24 hrs
<i>Staphylococcus aureus</i>	25923	Growth	24 hrs

User Quality Control: The final determination to the extent and quantity of user laboratory quality control must be determined by the end user.

If sterility testing is to be performed on this product, a representative sample of the lot(s) should be incubated anaerobically and aerobically for 48 – 96 hours.

If the nutritive capacity of this media is to be tested for performance, it is recommended that the following ATCC organisms be evaluated for growth.

Organism	ATCC #	Expected Growth
T. denticola	33521	72 – 96 hrs
T. phagedenis	27087	72 – 96 hrs
B. fragilis	25285	24 hrs
S. aureus	25923	24 hrs

Physical Appearance: OTEB should appear as a slightly hazy, golden yellow liquid. Precipitation may accumulate at the bottom of the tube due to a high concentration of serum.

References

1. Dowell, V. R., Jr., G. L. Lombard, F. S. Thompson and A. Y. Armfield. 1977. *Media for the Isolation, Characterization and Identification of Obligately Anaerobic Bacteria*. USDHHS, CDC. Atlanta, GA 30333.
2. Engelkirk, P. G., Duben-Engelkirk, J. and Dowell, V. R. 1992. *Principles and Practices of Clinical Anaerobic Bacteriology*. Star Publishing Co., Belmont, CA 94002.
3. Holdeman, L. V., F. P. Cato and W. E. C. Moore. 1987. *Anaerobe Laboratory Manual*. Virginia Polytechnic Institute and State University. Blacksburg, VA 24061
4. Jousimeis-Somer, H. R., Summanen, P., Citron, D. M., Baron, E. J., Wexler, H. M. and S. M. Finegold. 2002. *Wadsworth – KYL Anaerobic Bacteriology Manual*. Star Publishing Co., Belmont, CA 94002.
5. CLSI. *Quality Control for Commercially Prepared Microbiological Culture Media; Approved Standard- Third Edition*. (2004). CLSI document M22-A3. CLSI, 940 West Valley Road, Suite 1400, Wayne, PA 19087-1898.

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