

Product Insert

ENRICHED TRYPTIC SOY AGAR (ETSA)

Products

AS-548 Enriched Tryptic Soy Agar (ETSA) 4 plates / pkg

Intended Use

Enriched Tryptic Soy Agar (ETSA) is an enriched, non-selective, and differential medium intended for the isolation, quantitation, and partial identification of many fastidious and non-fastidious microorganisms.

Summary

ETSA agar is an enriched, non-selective, and differential medium. The nutritive base consists of casein, soy peptone, yeast extract, and dextrose. The media is supplemented with laked sheep blood and sheep serum to facilitate the recovery, and promote the black pigmentation of, *Prevotella* and *Porphyromonas spp.* Sodium formate and sodium fumarate were included as energy sources for microorganisms that require them for growth. Hemin and vitamin K₁ is added for the enhanced recovery of anaerobic bacteria. This medium is prepared, dispensed, and packaged under oxygen-free conditions to prevent the formation of oxidized products prior to use.

Formulation*

Pancreatic Digest of Casein	15.00	g
Agar	15.00	g
Soy Peptone	5.00	g
Sodium Chloride	5.00	g
Yeast Extract	1.00	g
Dextrose	1.00	g
Sodium Fumarate	1.00	g
Sodium Lactate	0.60	g
Sodium Succinate	0.50	G
Sodium Formate	0.50	g
Potassium Nitrate	0.50	g
Sodium Carbonate	0.40	g
L-Cysteine Hydrochloride (25.0% solution)	2.00	mL
Menadione	1.00	mg
Hemin (0.1% solution)	1.00	mL
Laked Sheep Blood	15.00	mL
Sheep Serum	40.00	mL
DI Water	1.00	L

Final pH: 7.5 ± 0.3 at 25° C

Final weight: 16.0 g ± 1.6 g

*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 (shrinking, cracking, or 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: 90 days from date of manufacture.

Procedure

Specimen Collection: Protect specimens for anaerobic culture from oxygen during collection, transportation, and processing. Consult appropriate references for detailed instructions concerning collection and transportation of anaerobes.

Methods for Use: ETSA agar should be inoculated directly with clinical specimen or from a broth that has been inoculated with a clinical specimen. Streak plates with inoculum to obtain isolated colonies and immediately place into an anaerobic atmosphere, incubating at 35-37°C for 18-48 hours. Extended periods of incubation may be required to recover some anaerobes. 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

This media supports good growth of many fastidious and non-fastidious anaerobes isolated from clinical specimens. It also facilitates the pigmentation of the black pigmented *Prevotella* and *Porphyromonas spp.*

Limitations

ETSA 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	Special Reaction
<i>Bacteroides fragilis</i>	25285	Growth	24 – 48 hrs	
<i>Prevotella melaninogenica</i>	25845	Growth	24 – 48 hrs	Pigment*
<i>Fusobacterium necrophorum</i>	25286	Growth	24 hrs	
<i>Fusobacterium nucleatum</i>	25586	Growth	24 – 48 hrs	
<i>Clostridium perfringens</i>	13124	Growth	24 hrs	
<i>Peptostreptococcus anaerobius</i>	27337	Growth	24 hrs	
<i>Prevotella intermedia</i>	25611	Growth	24 hrs	Pigment*
<i>Propionibacterium acnes</i>	6919	Growth	24 – 48 hrs	
<i>Eggerthella lenta</i>	43055	Growth	24 hrs	
<i>Actinomyces viscosus</i>	43146	Growth	24 – 48 hrs	
<i>Porphyromonas gingivalis</i>	33277	Growth	24 – 72 hrs	Pigment*

*Pigment production may require more than 48 hours of incubation.

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	Special Reaction
B. fragilis	25285	24 hrs	
P. melaninogenica	25845	24 – 48 hrs	Pigment
F. nucleatum	25586	24 hrs	
C. perfringens	13124	24 hrs	
P. anaerobius	27337	24 hrs	
P. intermedia	25611	24 – 48 hrs	Pigment
P. gingivalis	33277	24 – 48 hrs	Pigment

Physical Appearance: ETSA should appear opaque to translucent and amber in color.

References

1. Dowell, V. R., Jr. and T. M. Hawkins. 1987. *Laboratory Methods in Anaerobic Bacteriology*. CDC Laboratory Manual. 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.

Revision Date: 10/25/17