

Product Insert

BRAIN HEART INFUSION AGAR WITH HORSE BLOOD AND TAUROCHOLATE (BHIY-HT)

Products

AS-6463 Brain Heart Infusion Agar with Horse Blood and Taurocholate (BHIY-HT) 4 plates / pkg

Intended Use

Brain Heart Infusion Agar with Horse Blood and Taurocholate (BHIY-HT) is an enriched non-selective media for the germination and cultivation of *Clostridium difficile* cells and spores along with other fastidious anaerobic microorganisms.

Summary

BHIY-HT agar is an enriched non-selective media used for the isolation and cultivation of a wide variety of microorganisms, including yeast and molds. The basic nutritive properties are brain heart infusion, meat peptone, and yeast extract. Horse blood is added to stimulate growth. Sodium taurocholate is added to promote the germination of *Clostridium difficile* spores. When grown on this media, *Clostridium difficile* will exhibit characteristic colonial morphology, fluorescence, and smell. This media is prepared, dispensed, and packaged under oxygen-free conditions to prevent the formation of oxidized products prior to use.

Formulation*

Brain Heart Infusion	17.50	g
Proteose Peptone	10.00	g
Dextrose	2.00	g
Sodium Chloride	5.00	g
Disodium Phosphate	2.50	g
Yeast Extract	5.00	g
Agar	15.00	g
Sodium Taurocholate	1.00	g
Horse Blood	70.00	mL
DI Water	1.00	L

Final pH: 7.2 ± 0.2 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 medium 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: BH1Y-HT agar should be inoculated directly with a clinical specimen or from a broth that has been inoculated from a clinical specimen. Streak plates with inoculum to obtain isolated colonies and immediately place in 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.

Limitations

BH1Y-HT 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>Bacteroides fragilis</i>	25285	Growth	24 hrs
<i>Enterococcus faecalis</i>	29212	Growth	24 hrs
<i>Clostridium sporogenes</i>	3584	Growth	24 hrs
<i>Clostridium beijerinckii</i>	8260	Inhibited	24 hrs
<i>Proteus mirabilis</i>	12453	Growth	24 hrs
<i>Clostridium perfringens</i>	13124	Growth	24 hrs
<i>Clostridium innocuum</i>	14501	Growth	24 hrs
<i>Clostridium sordellii</i>	9714	Variable	24 hrs
<i>Clostridium difficile</i>	9689	Growth	24 hrs
<i>Clostridium difficile</i>	700057	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/inhibitory capacity of this media is to be tested for performance, it is recommended that the following ATCC organisms be evaluated for growth/inhibition.

Organism	ATCC #	Expected Growth
B. fragilis	25285	24 hrs
C. perfringens	13124	24 hrs
C. difficile	9689	24 hrs
S. aureus	25923	24 hrs
E. coli	25922	24 hrs

Physical Appearance: BHIY-HT agar should appear opaque burgundy in color.

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. Englekirk, P. G., Duben-Englekirk, 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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