

## Product Insert

### BRUCELLA BROTH (BRU BROTH)

#### Products

AS-105 Brucella Broth (BRU BROTH) 10 Tubes / pkg

#### Intended Use

Brucella Broth (BRU BROTH) is an enriched non-selective media intended for the cultivation of most anaerobic bacteria and other fastidious microorganisms. This media will support the growth of aerobic and microaerophilic bacteria if incubated appropriately.

#### Summary

BRU BROTH is an enriched non-selective broth media. The basal media consists of casein and peptones to facilitate the growth of a wide variety of microorganisms. Yeast extract is provided as a source of trace vitamins and micronutrients. A small volume of dextrose is added as a carbohydrate source, to prevent acid build up. This media is supplemented with vitamin K<sub>1</sub> and hemin to facilitate the recovery and growth of *Prevotella melaninogenica*. This media is prepared, stored, and dispensed under oxygen-free conditions to prevent the formation of oxidized products prior to use.

#### Formulation\*

Pancreatic Digest of Casein	10.00	g
Soy Peptone	3.00	g
Meat Peptone	10.00	g
Dextrose	1.00	g
Yeast Extract	2.00	g
Sodium Chloride	5.00	g
Sodium Bisulfite	0.10	g
Hemin (0.1% solution)	5.00	mL
Vitamin K <sub>1</sub> (1.0% solution)	0.10	mL
L-Cysteine Hydrochloride (25.0% solution)	2.00	mL
DI Water	1.00	L

Final pH: 7.1 ± 0.2 at 25° C

Final volume: 4.0 mL ± 0.8 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 (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:** 1 year 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:** BRU BROTH should be inoculated directly with clinical specimen or with isolated colonies, immediately placed into an anaerobic atmosphere and incubated 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 should support good growth of obligate anaerobes, aerobes, and microaerophilic microorganisms isolated from clinical specimens.

## Limitations

BRU BROTH will not provide complete information for identification of bacterial isolates. Additional test procedures and media are required for complete identification. In some cases, this media may not grow every anaerobic strain. Consult reference materials for additional information.

## Quality Control

The following organisms are routinely used for quality control testing (nutritive capacity) at Anaerobe Systems.

Organism Tested	ATCC #	Results	Time
<i>Bacteroides fragilis</i>	25285	Growth	24 hrs
<i>Bacteroides vulgatus</i> *	8482	Growth	24 hrs
<i>Bacteroides thetaiotaomicron</i>	29741	Growth	24 hrs
<i>Eggerthella lenta</i>	43055	Growth	24 – 48 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
<i>Clostridium novyi</i>	7659	Growth	24 hrs
<i>Propionibacterium acnes</i>	6919	Growth	24 – 48 hrs

\* Organisms specified by CLSI for Quality Control testing of Anaerobic Broths.

**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
F. necrophorum	25286	24 hrs
P. melaninogenica	25845	24 - 48 hrs
C. perfringens	13124	24 hrs
P. anaerobius	27337	24 hrs

**Physical Appearance:** BRU BROTH should appear as a clear, yellow liquid within a 16 mm x 100 mm glass tube with a hungate cap.

## 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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