



## INSTRUCTIONS FOR USE

### BRUCELLA AGAR DEEP (BRU DEEP)

#### PRODUCTS

AS-810                      Brucella Agar Deep (BRU DEEP) – 18 mL tube                      10 tubes / pkg

#### INTENDED PURPOSE

TruPRAS™ Anaerobic Culture Media is intended for the transport, preservation, or cultivation of a wide variety of microorganisms from specimens to aid in the isolation of bacteria for in vitro diagnostic and / or research / general laboratory purposes.

#### INTENDED USERS

Scientists, laboratory, and healthcare professionals trained in anaerobic microbiology techniques working in areas such as clinical, research, industrial, pharmaceutical and veterinary applications.

#### FORMULATION\*

BRU DEEP, with user-supplied blood, is intended for the growth of obligate anaerobic bacteria from a wide variety of specimen types. When incubated under appropriate conditions, this medium also supports the growth of aerobic and microaerophilic organisms. BRU DEEP is an enriched, non-selective medium. Its base contains casein peptone, dextrose, and yeast extract, providing essential nutrients for a broad range of organisms. The medium is further supplemented with vitamin K<sub>1</sub> and hemin to enhance the recovery and pigment production of organisms such as *Prevotella melaninogenica*. When 5% (v/v) defibrinated sheep blood is added, BRU DEEP also allows for the observation of hemolytic reactions, including the characteristic double zone of B-hemolysis produced by *Clostridium perfringens*. This medium is prepared, dispensed, and packaged under oxygen-free conditions using TruPRAS™ Technology to prevent the formation of oxidized products prior to use. This product is supplied ready to use, with no pre-reduction step required.

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
Agar	15.00	g
Sodium chloride	5.00	g
Sodium bisulfite	0.10	g
L-Tryptophan	0.20	g
L-Cystine	0.40	g
Sodium hydroxide	0.16	g
Hemin	5.00	mg
Vitamin K <sub>1</sub>	10.00	mg
DI Water	1.00	L

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

Final pH: 7.2 ± 0.2 at 25°C

Final volume: 18.0 mL ± 1.8 mL



## PRECAUTIONS

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

Report serious incidents that occur in direct relation to this product to [tech@biolog.com](mailto:tech@biolog.com). As necessary, report serious incidents to the regulatory authority in which the user is established.

This product may contain components of animal origin. All components of animal origin have been sourced from Bovine Spongiform Encephalopathy- (BSE-) free and Transmissible Spongiform Encephalopathy- (TSE-) free countries. Certified knowledge of the origin of animal derived components does not guarantee the absence of transmissible pathogenic agents. It is recommended that Universal Precautions be observed.

When working with anaerobic culture media, the potential for ergonomic hazards may exist due to repetitive motions, awkward postures, improper bench/chair heights or poor lighting. Although it is beyond the scope and provision of products by Anaerobe Systems, it should be recognized and mitigated by the end user in the laboratory environment.

## STORAGE AND SHELF LIFE

**Storage:** Upon receipt, store at room temperature (15 – 25°C) 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), contamination, broken cap, or cracked glass. 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 the 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. The selection of specimens for culture is made by physicians or scientists collecting the sample.

**Methods for Preparation:** Melt the medium using a boiling water bath, microwave oven, or by briefly autoclaving. Once fully liquefied, cool the tubes in a water bath maintained at 48 – 50°C. When the medium has reached the desired temperature, aseptically add 1.0 mL of laked or defibrinated sheep blood per tube. Mix thoroughly by gently inverting or rotating the tubes to ensure even distribution. Pour the contents into sterile standard round petri dishes and allow the medium to solidify. Once solidified, dry the plates by placing them with slightly ajar lids in a laminar flow hood or incubator for approximately 30 minutes.

**Methods for Use:** After preparing BRU DEEP with 5% sheep blood as described above, inoculate the medium directly with the test specimen or from a broth culture previously inoculated with the specimen. Streak the surface to obtain isolated colonies. Immediately place the plates into an anaerobic atmosphere and incubate at 35 – 37°C for 18 to 48 hours. Refer to the listed references for detailed instructions on the processing of anaerobic cultures. As packaged, this medium constitutes a qualitative, manual method.

## 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, water bath, defibrinated / laked sheep blood, petri plates, disinfectant, other culture media, and serological / biochemical reagents.



## INTERPRETATION OF RESULTS

BRU DEEP, when supplemented with 5% defibrinated sheep blood, supports robust growth of obligate anaerobic bacteria from a variety of specimen types. It also facilitates characteristic pigment production by *Prevotella melaninogenica* and the typical double zone of  $\beta$ -hemolysis exhibited by *Clostridium perfringens*.

## LIMITATIONS

BRU DEEP does not provide sufficient information for the complete identification of bacterial isolates. Additional test procedures and media are necessary for full identification. In some cases, after inoculation with a specimen, BRU DEEP supplemented with 5% sheep blood may be overgrown by swarming organisms such as *Proteus* spp. or *Clostridium* spp., which can obscure the growth of other bacteria. Refer to appropriate reference materials for further guidance.

## QUALITY CONTROL

The following organisms are routinely used for quality control testing at Anaerobe Systems using the specifications outlined in the CLSI document M22-A3: Quality Control for Commercially Prepared Microbiological Culture Media.

Organism Tested	ATCC® #	Results	Special Reaction (with addition of blood)
<i>Bacteroides fragilis</i>	25285	Growth	
<i>Prevotella melaninogenica</i>	25845	Growth	Pigmentation (tan color)
<i>Fusobacterium nucleatum</i>	25586	Growth	
<i>Fusobacterium necrophorum</i>	25286	Growth	
<i>Clostridium perfringens</i>	13124	Growth	Double zone of $\beta$ -hemolysis
<i>Peptostreptococcus anaerobius</i>	27337	Growth	
<i>Enterococcus faecalis</i>	29212	Growth	
<i>Cutibacterium acnes</i>	6919	Growth	
<i>Staphylococcus aureus</i>	25923	Growth	
<i>Escherichia coli</i>	25922	Growth	
<i>Clostridioides difficile</i>	9689	Growth	
<i>Proteus mirabilis</i>	12453	Growth	

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

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

Organism Tested	ATCC® #	Results	Special Reaction (with addition of blood)
<i>Bacteroides fragilis</i>	25285	Growth	
<i>Prevotella melaninogenica</i>	25845	Growth	Pigmentation (tan color)
<i>Peptostreptococcus anaerobius</i>	27337	Growth	
<i>Fusobacterium necrophorum</i>	25286	Growth	
<i>Clostridium perfringens</i>	13124	Growth	Double zone of $\beta$ -hemolysis

**Physical Appearance:** BRU DEEP should appear hazy to opaque and tan in color.

ATCC® is a registered trademark of American Type Culture Collection.



## REFERENCES

1. CLSI. *Principles and Procedures for Detection of Anaerobes in Clinical Specimens; Approved Guideline*. CLSI document M56-A. Clinical and Laboratory Standards Institute; 2014
2. Leber AL, Burnham CA, eds. *Clinical Microbiology Procedures Handbook*. 5th ed. 4 vols. Washington, DC: ASM Press; 2023.
3. Carroll KC, Pfaller MA, eds. *Manual of Clinical Microbiology*. 13th ed. 4 vols. Hoboken, NJ: Wiley-Blackwell; 2023.
4. 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.
5. U.S. Department of Agriculture, Animal and Plant Health Inspection Service. *Animal Health Status of Regions*. Published March 12, 2025. <https://www.aphis.usda.gov/regionalization-evaluation-services/region-health-status>
6. European Commission. *Note for guidance on minimising the risk of transmitting animal spongiform encephalopathy agents via human and veterinary medicinal products (EMA/410/01 Rev. 3)*. Published March 5, 2011. <https://op.europa.eu/en/publication-detail/-/publication/3392e464-ba89-4ae4-955c-a07f617c8e06/language-en>

## GLOSSARY OF SYMBOLS

SYMBOL	TITLE	DESCRIPTION	STANDARD	REF#
	Catalog number	Indicates the manufacturer's catalog number so that the medical device can be identified.	ISO 15223-1 Medical devices – Symbols to be used with medical device labels, labelling, and information to be supplied	5.1.1
	Lot number/ Batch code	Indicates the manufacturer's batch code so that the batch or lot can be identified.	ISO 15223-1 Medical devices – Symbols to be used with medical device labels, labeling, and information to be supplied	5.1.5
	Use-by date	Indicates the date after which the medical device is not to be used.	ISO 15223-1 Medical devices – Symbols to be used with medical device labels, labelling, and information to be supplied	5.1.4
	Authorized Representative	Indicates the Authorized Representative in the identified country or jurisdiction.	ISO 15223-1 Medical devices – Symbols to be used with medical device labels, labelling, and information to be supplied	5.1.2
	Do not re-use/ Single use only	Indicates a medical device that is intended for one single use only.	ISO 15223-1 Medical devices – Symbols to be used with medical device labels, labelling, and information to be supplied	5.4.2
	Consult instructions for use or consult electronic instructions for use	Indicates the need for the user to consult the instructions for use.	ISO 15223-1 Medical devices – Symbols to be used with medical device labels, labelling, and information to be supplied	5.4.3
	Temperature limit	Indicates the temperature limits to which the medical device can be safely exposed.	ISO 15223-1 Medical devices – Symbols to be used with medical device labels, labelling, and information to be supplied	5.3.7
	In vitro diagnostic medical device	Indicates that a medical device is intended to be used as an in vitro diagnostic medical device	ISO 15223-1 Medical devices – Symbols to be used with medical device labels, labelling, and information to be supplied	5.5.1
	CE Mark European Conformity	Designates that the product labeled is authorized for sale in European countries.	EU IVDR (EU) 2017/746	



**AUTHORIZED REPRESENTATIVE INFORMATION**



**REVISION 4**

Additions: Intended Use, Intended Users, Animal Origin Statement, Ergonomics Precautions, Serious Incident Report Contact Information, Glossary of Symbols

Changes: Title change from Product Insert to Instructions for Use. Room temperature from 20 – 25°C to 15 – 25°C. References updated. Contact information.

Deletions: None