

Instructions for Use

CRITERION™ SELECTIVE STREP AGAR BASE

Cat. no. C6890	CRITERION™ Selective Strep Agar Base	91.48gm
Cat. no. C6891	CRITERION™ Selective Strep Agar Base	500gm
Cat. no. C6892	CRITERION™ Selective Strep Agar Base	2kg
Cat. no. C6893	CRITERION™ Selective Strep Agar Base	10kg
Cat. no. C6894	CRITERION™ Selective Strep Agar Base	50kg

INTENDED USE

Hardy Diagnostics CRITERION™ Selective Strep Agar Base is recommended for the selective isolation of all species of streptococci.

This dehydrated culture medium is a raw material intended to be used in the making of prepared media products, which will require further processing, additional ingredients, or supplements.

SUMMARY

CRITERION™ Selective Strep Agar Base is designed to inhibit gram-negative bacilli and staphylococci, thereby allowing for the isolation, subculture, and identification of pathogenic streptococci (groups A, B, C, F and G), including beta-hemolytic streptococci and *S. pneumoniae*.

Tryptic Soy Agar is the basal medium for CRITERION™ Selective Strep Agar Base. Organic nitrogen, particularly amino acids and long-chained peptides, are supplied by the casein peptones, rendering the medium highly nutritious. Osmotic equilibrium is maintained by sodium chloride. Sheep blood (5%) is added to facilitate growth and to detect hemolytic activity. Selective agents are present in the media to suppress much of the oral flora, including coliforms, staphylococci, *Micrococcus*, *Haemophilus* and *Neisseriaspecies*.

FORMULA

Gram weight per liter:	44.0gm/L
Pancreatic Digest of Casein	15.0gm
Papaic Digest of Soybean Meal	7.5gm
Sodium Chloride	5.0gm
Nucleic Acid	3.0gm
Selective Agents	15.3mg
Agar	13.5gm

Final pH 7.3 +/- 0.2 at 25°C.

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

STORAGE AND SHELF LIFE

Store the sealed bottle(s) containing dehydrated culture medium at 2-30°C. Dehydrated culture medium is very hygroscopic. Keep lid tightly sealed. Protect dehydrated culture media from moisture and light. The dehydrated culture media should be discarded if it is not free-flowing or if the color has changed from its original light beige.

Store the prepared culture media at 2-8°C.

The expiration date on the product label applies to the product in its intact packaging when stored as directed. The product may be used and tested up to the expiration date on the product label and incubated for the recommended incubation times as stated below.

Refer to the document "[Storage](#)" for more information.

PRECAUTIONS

This product may contain components of animal origin. Certified knowledge of the origin and/or sanitary state of the animals does not guarantee the absence of transmissible pathogenic agents. Therefore, it is recommended that these products be treated as potentially infectious, and handle observing the usual universal blood precautions. Do not ingest, inhale, or allow to come into contact with skin.

This product is for laboratory use only. It is to be used only by adequately trained and qualified laboratory personnel. Observe approved biohazard precautions and aseptic techniques. All laboratory specimens should be considered infectious and handled according to "standard precautions." Refer to the document "[Guidelines for Isolation Precautions](#)" from the Centers for Disease Control and Prevention.

For additional information regarding specific precautions for the prevention of the transmission of all infectious agents from laboratory instruments and materials, and for recommendations for the management of exposure to infectious disease, refer to CLSI document M29: *Protection of Laboratory Workers from Occupationally Acquired Infections*.

Sterilize all biohazard waste before disposal.

Refer to the document "[Precautions When Using Media](#)" for more information.

METHOD OF PREPARATION FOR DEHYDRATED CULTURE MEDIA

1. Suspend 45.74gm of the dehydrated culture media in 1 liter of distilled or deionized water. Stir to mix thoroughly.
2. Heat to boiling to dissolve completely.
3. Sterilize in the autoclave at 121°C. for 15 minutes.
4. Cool to 45-50°C.
5. Aseptically add 50ml of sterile defibrinated sheep blood. Stir gently while dispensing.

PROCEDURE AND INTERPRETATION OF RESULTS

For information on procedures and interpretation of results, consult listed references or refer to the prepared media Instructions for Use (IFU) for Cat. No. A10.

LIMITATIONS

It is recommended that biochemical, immunological, molecular, or mass spectrometry testing be performed on colonies from pure culture for complete identification.

Some formulations may require a settling period before pH testing of the prepared medium. If the pH is tested immediately after preparation and is out of specification, retest the medium after 24 hours to obtain final pH results. Always take pH reading at room temperature.

Prepared Selective Strep Agar with added sheep blood is designed to grow all species of streptococci, which would include some normal respiratory flora, such as *S. viridans*.

Unless a provision is made to reduce oxygen tension, approximately 2% of group A streptococci may be missed if incubated aerobically. It is recommended that several stabs be made into the medium upon inoculation.⁽²⁾ Incubation in increased CO₂ or anaerobically is recommended.

Prepared Selective Strep Agar with added sheep blood may be inhibitory to certain rare strains of streptococci.

Refer to the document "[Limitations of Procedures and Warranty](#)" for more information.

MATERIALS REQUIRED BUT NOT PROVIDED

Standard microbiological supplies and equipment such as autoclaves, incinerators, and incubators, etc., are not provided.

QUALITY CONTROL

Hardy Diagnostics tests each lot of commercially manufactured media using appropriate quality control microorganisms and quality specifications as outlined on the Certificate of Analysis (CofA) and the CLSI document M22-A3 *Quality Assurance for Commercially Prepared Microbiological Culture Media*. The following microorganisms are routinely used for testing at Hardy Diagnostics:

Test Organisms	Inoculation Method*	Incubation			Results
		Time	Temperature	Atmosphere	
<i>Streptococcus pyogenes</i> ATCC® 19615	A	24hr	35°C	CO ₂ **	Growth; beta-hemolysis
<i>Streptococcus pneumoniae</i> ATCC® 6305	A	24hr	35°C	CO ₂ **	Growth; alpha-hemolysis
<i>Escherichia coli</i> ATCC® 25922	B	24hr	35°C	CO ₂ **	Inhibited
<i>Staphylococcus epidermidis</i> ATCC® 12228	B	24hr	35°C	CO ₂ **	Inhibited

* Refer to the document "[Inoculation Procedures for Media QC](#)" for more information.

USER QUALITY CONTROL

Users of dehydrated culture media should perform QC testing in accordance with applicable government regulatory agencies, and in compliance with accreditation requirements. Hardy Diagnostics recommends end users check for signs of contamination and deterioration and, if dictated by laboratory quality control procedures or regulation, perform quality control testing to demonstrate growth or a positive reaction and to demonstrate inhibition or a negative reaction, if applicable. Hardy Diagnostics quality control testing is documented on the certificate of analysis (CofA) available from Hardy Diagnostics [Certificate of Analysis](#) website. In addition, refer to the following document "[Finished Product Quality Control Procedures](#)," for more information on QC or see the reference(s) for more specific information.

** Atmosphere of incubation is enriched with 5-10% CO₂.

PHYSICAL APPEARANCE

CRITERION™ Selective Strep Agar Base powder should appear homogeneous, free-flowing, and light beige in color. The prepared media without added blood should appear clear to a trace hazy, and amber in color. The prepared media with added sheep blood should appear opaque, and cherry red in color.

REFERENCES

1. Anderson, N.L., et al. *Cumitech 3B; Quality Systems in the Clinical Microbiology Laboratory*, Coordinating ed., A.S. Weissfeld. American Society for Microbiology, Washington, D.C.
2. Jorgensen., et al. *Manual of Clinical Microbiology*, American Society for Microbiology, Washington, D.C.
3. Tille, P., et al. *Bailey and Scott's Diagnostic Microbiology*, C.V. Mosby Company, St. Louis, MO.
4. Isenberg, H.D. *Clinical Microbiology Procedures Handbook*, Vol. I, II & III. American Society for Microbiology, Washington, D.C.
5. Koneman, E.W., et al. *Color Atlas and Textbook of Diagnostic Microbiology*, J.B. Lippincott Company, Philadelphia, PA.
6. Pacifico, L., et al. 1995. *Journal of Clinical Micro.*; 33; 9:2480-2482. American Society for Microbiology.

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

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[Ordering Information](#)

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