

%5 SHEEP BLOOD AGAR W/ BACITRACIN

INTENDED USE:

5% Sheep Blood Agar is a selective medium for use in the isolation and presumptive identification of group A streptococci from throat cultures and other clinical specimens.

PRINCIPLE AND INTERPRETATION:

Infection with Lancefield group A streptococci (*Streptococcus pyogenes*) may produce serious sequelae such as rheumatic fever and acute glomerulonephritis. Therefore, early detection and identification are important. Because of the overgrowth of normal flora present in throat culture specimens plated on routine blood agar plates, selective ingredients have been added to sheep blood agar to enhance the detection of group A streptococci.

Evaluation of various antimicrobial agents in our laboratories resulted in a combination with improved selectivity over other selective media tested. This medium allows presumptive identification of group A streptococci, based on bacitracin susceptibility and beta hemolysis, within 24 h after inoculation with the specimen when the medium is incubated in a carbon dioxide-enriched atmosphere.

Defibrinated sheep blood supplies enrichment for the growth of such fastidious organisms and allows detection of the typical beta-hemolysis of *S. pyogenes*.

Beta-hemolytic streptococci which show a zone of inhibition around a bacitracin disc may be presumptively identified as group A streptococci. species, as well as modify the effects of the inhibitory characteristics of the medium.

Some diagnostic tests may be performed with the primary isolation plate. However, a pure culture is recommended for biochemical tests and serological procedures.

COMPOSITION:

Ingredients	Gr/Liter
Special peptone	23 gr
Starch	1 gr
Sodium chloride	5 gr
Bacitracin	20.000 IU
Agar	10 gr

***Formula adjusted, standardized to suit performance parameters

pH: 7,4 ± 0,2

PRECAUTIONS:

For professional use only. Do not use plates if they show evidence of microbial contamination, discoloration, drying, cracking or other signs of deterioration.

TEST PROCEDURE:

- Inoculate representative samples with the cultures diluted to contain 50-100 CFU per 0,1 mL.
 - Add 0,1 mL of the appropriate dilution to each plate and spread-inoculate using a sterile glass spreader.
 - Incubate the *Escherichia*, *Shigella* and *Staphylococcus* strains at 35 ± 2°C in an aerobic atmosphere and the *Streptococcus* at 35 ± 2°C in an aerobic atmosphere supplemented with 3-5% carbon dioxide.
- Examine plates after 24-48 h for amount of growth, colony size and hemolytic reactions.

QUALITY CONTROL:**1.Sterility Control:**

Incubation 96 hours at 30-35°C: NO GROWTH

2.Physical/Chemical Control

pH: 7,4 ± 0,2

Apperance: Red

3.Microbiological Control: Incubation at 30-35 °C during 24-48 h

Microorganism	Inoculum (CFU)	Results	
		Growth	Reaction
Streptococcus pyogenes ATCC 19615	10-100	Good	Good (β hemolysis)
Group A Streptococcus sp	100-1000	Inhibition	-

STORAGE CONDITIONS AND SHELF LIFE:

Store the prepared medium at 2 - 12°C. Use before expiry date on the label. Do not use beyond stated expiry date.

DISPOSAL:

Incubated prepared medium may contain active bacteria and micro-organisms. Do not open infected medium. Infected plate should be autoclaved, incinerated or opened and soaked in a chlorine-based disinfectant (liquid bleach) for 20 minutes prior to disposal.

PACKAGING:

Katalog Number: 02003

Packaging: Single wrap

Content: 10 plates/each package

REFERENCES:

1. Evans, G.L., and T.E. O'Neill. 1984. Development of an improved selective medium for the isolation of group A streptococci from throat cultures, Abstr. C-136, p. 259. Abstr. 84th Annu. Meet. Am. Soc. Microbiol. 1984.
2. Carlson, J.R., W.G. Merz, B.E. Hansen, S. Ruth, and D.G. Moore. 1985. Improved recovery of group A beta-hemolytic streptococci with a new selective medium. J. Clin. Microbiol. 21:307-309.
3. Baron, E.J., L.R. Peterson, and S.M. Finegold. 1994. Bailey & Scott's diagnostic microbiology, 9th ed. Mosby-Year Book, Inc., St. Louis.
4. Ruoff, K.L. 1995. Streptococcus, p. 299-307. In P.R. Murray, E.J. Baron, M.A. Pfaller, F.C. Tenover, and R.H. Tenover (ed.), Manual of clinical microbiology, 6th ed. American Society for Microbiology, Washington, D.C.
5. Koneman, E.W., S.D. Allen, W.M. Janda, P.C. Schreckenberger, and W.C. Winn, Jr. 1992. Color atlas and textbook of diagnostic microbiology, 4th ed. J.B. Lippincott Co., Philadelphia.



Aseptic Sterile



Batch Code



Catalogue Number



Negative Controls



Positive Controls



Use by



Temperature Limitation



Do not reuse



Contains sufficient for <n> tests



Look at user manual



Manufacturer