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%5 SHEEP BLOOD AGAR

INTENDED USE:

5% Sheep Blood Agar is a highly nutritious general purpose medium for the isolation and cultivation of nonfastidious and fastidious microorganisms from clinical specimens.

PRINCIPLE AND INTERPRETATION:

5% Sheep Blood derives its superior growth-supporting properties from the combination of two peptones, and yeast extract as a supplier of the B complex vitamins. Corn starch is included to absorb toxic by-products contained in the specimen and serves as an energy source for organisms possessing alphaamylases. Sheep blood allows detection of hemolytic reactions and supplies the X factor (heme) necessary for the growth of many pathogenic species. On this medium, colonies tend to be larger and growth is more luxuriant than on media. Casein enzymic hydrolysate and yeast extract provide nitrogen, carbon, amino acids and vitamins. Peptic digest of animal tissue is the nitrogen source. Sodium chloride maintains the osmotic balance.

COMPOSITION:

Ingredients	Gr/Liter
Special peptone	23 gr
Starch	1 gr
Sodium chloride	5 gr
Sheep Blood	50 ml
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:

1. Inoculate representative samples with the cultures diluted to contain 50-100 CFU per 0,1 mL.
a. Add 0,1 mL of the appropriate dilution to each plate and spread-inoculate using a sterile glass spreader.
b. 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.
2. Examine plates after 24-48 h for amount of growth, colony size and hemolytic reactions.

QUALITY CONTROL:

1.Sterility Control:

Incubation 48 hours at 30-35ºC and 72 hours at 20-25ºC: NO GROWTH

2.Phsical/Chemical Control

pH: 7,4 ± 0,2
Apperance: Red

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

Microorganism	Inoculum (CFU)	Results	
		Growth	Reaction
Staphylococcus aureus ATCC 25923	10-100	Good	Good (β hemolysis)
Streptococcus pyogenes ATCC 19615	10-100	Good	Good (β hemolysis)
Streptococcus pneumoniae ATCC 6305	10-100	Inhibition	Good (α hemolysis)
Escherichia coli ATCC 25922	10-100	Inhibition	Good (γ hemolysis)

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.

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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: 02002
Packaging: Single wrap
Content: 10 plates/each package

REFERENCES:

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3. Murray, P. R., E. J. Baron, J.H. Jorgensen, M. A. Pfaller, and R. H. Yolken (ed.).2003. Manual of clinical microbiology, 8th ed. American Society for Microbiology, Washington, D.C.
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