

%5 SHEEP BLOOD AGAR / MACCONKEY 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.

Macconkey Agar a selective medium giving excellent differentiation between coliforms and non-lactose fermenters with inhibition of Gram-positive micrococci.

PRINCIPLE AND INTERPRETATION:

%5 Sheep Blood Agar is general-purpose medium for the isolation and cultivation of nonfastidious and fastidious microorganisms from a variety of clinical and nonclinical materials.

MacConkey agar is a selective and differential culture medium for bacteria designed to selectively isolate Gram-negative and enteric (normally found in the intestinal tract) bacilli and differentiate them based on lactose fermentation. The crystal violet and bile salts inhibit the growth of gram-positive organisms which allows for the selection and isolation of gram-negative bacteria. Enteric bacteria that have the ability to ferment lactose can be detected using the carbohydrate lactose, and the pH indicator neutral red.

COMPOSITION:

%5 SHEEP BLOOD AGAR	
Ingredients	Gr/Liter
Special peptone	23 gr
Starch	1 gr
Sodium chloride	5 gr
Agar	10 gr
Defibrinated Sheep Blood	50 mL

***Formula adjusted, standardized to suit performance parameters
pH 7,4 ± 0.2

MACCONKEY AGAR	
Ingredients	Gr/Liter
Peptone	20 gr
Lactose	10 gr
Bile salts No.3	1,5 gr
Sodium chloride	5 gr
Neutral red	0,03 gr
Crystal violet	0,001 gr
Agar	15 gr

***Formula adjusted, standardized to suit performance parameters
pH 7,2 ± 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:

Incubate plates at 35 ± 2°C in an aerobic atmosphere supplemented with carbon dioxide. Read plates after 18 to 24 and after 42 to 48 hours of incubation.

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

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

2.Physical/Chemical Control

pH (%5 Sheep Blood Agar): 7,4 ± 0,2 / pH (MacConkey Agar) : 7,2 ± 0,2

Apperance(%5 Sheep Blood Agar): Prepared medium with 5% sheep blood is red and opaque.

Apperance(MacConkey Agar): Reddish purple

3.Microbiological Control: Incubate plates at $35 \pm 2^{\circ}\text{C}$ in an aerobic atmosphere supplemented with carbon dioxide. Read plates after 24-48 hours of incubation.

Microorganism	Inoculum (CFU)	Results	
		%5 Sheep Blood Agar	MacConkey Agar
Escherichia coli ATCC 25922	10-100	Good(γ hemolysis)	Pink colonies w/bile ppt
Staphylococcus aureus ATCC 25923	10-100	Good(β hemolysis)	Inhibition
Streptococcus pneumoniae ATCC 6305	10-100	Good(α hemolysis)	—
Streptococcus pyogenes ATCC 19615	10-100	Good(β hemolysis)	—
Salmonella typhimurium ATCC 14028	10-100	—	Colourless colonies
Pseudomonas aeruginosa ATCC 9027	10-100	—	Inhibition

STORAGE CONDITIONS AND SHELF LIFE:

Store the prepared medium at $2 - 12^{\circ}\text{C}$. 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: 03008

Packaging: Single wrap

Content: 10 plates/each package

REFERENCES:

1. Ellner, Stoessel, Drakeford and Vasi. 1966. Am. J. Clin. Pathol. 45:502.
2. Fildes. 1920. Br. J. Exp. Pathol. 1:129.
3. Fildes. 1921. Br. J. Exp. Pathol. 2:16.
4. Chapin and Doern. 1983. J. Clin. Microbiol. 17:163.
5. Barnes Ella M. and Goldberg H. S. (1962) J. Appl. Bact. 25(1). 94-106.
6. Medrek T. F. and Barnes Ella M. (1962) J. Appl Bact. 25(2). 159-168.
7. Barnes Ella M. and Shrimpton D. H. (1957) J. Appl. Bact. 20(2). 273-285.
8. Thornley Margaret J. (1957) J. Appl. Bact. 20(2). 273-285.



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