

RTA.KK.159 Revision Date/Revision Number:-/0 Issue Date: 17.05.2016

COLUMBIA AGAR W/%5 SHEEP BLOOD

INTENDED USE:

Columbia Agar with 5% Sheep Blood is a general purpose culture medium used for the growth and recovery of fastidious microbial species.

PRINCIPLE AND INTERPRETATION:

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

COMPOSITION:

COLUMBIA AGAR W/%5 SHEEP BLOOD		
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 $pH 7.3 \pm 0.2$

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 $35 \pm 2^{\circ}$ 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 96 hours at 30-35°C: NO GROWTH

2.Phsical/Chemical Control

pH: $7,3 \pm 0,2$

Apperance: Prepared medium with 5% sheep blood is red and opaque.

3.Microbiological Control: Incubation at 37 °C during 24-48 h.

Microorganism	Inoculu	Results	
	m (CFU)	Growth	Reaction
Escherichia coli ATCC 25922	10-100	Good	γ hemolysis
Staphylococcus aureus ATCC 25923	10-100	Good	β hemolysis
Streptococcus pneumoniae ATCC 6305	10-100	Good	a hemolysis
Streptococcus pyogenes ATCC 19615	10-100	Good	β 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: 02024 Packaging: Single wrap Content: 10 plates/each package

REFERENCES:

1. Ellner, P.D., C.J. Stoessel, E. Drakeford, and F. Vasi. 1966. A new culture medium for medical bacteriology. Am. J. Clin. Pathol. 45:502-504.

2. National Committee for Clinical Laboratory Standards. 2001. Approved Guideline M29-A2. Protection of laboratory workers from occupationally acquired infections, 2nd ed. NCCLS, Wayne, PA.

 Garner, J.S. 1996. Hospital Infection Control Practices Advisory Committee, U.S. Department of Health and Human Services, Centers for Disease Control and Prevention. Guideline for isolation precautions in hospitals. Infect. Control Hospital Epidemiol. 17:53-80.
U.S. Department of Health and Human Services. 1999. Biosafety in microbiological and biomedical laboratories, HHS Publication (CDC), 4th ed. U.S. Government Printing Office, Washington, D.C.

5. Directive 2000/54/EC of the European Parliament and of the Council of 18 September 2000 on the protection of workers from risks related to exposure to biological agents at work (seventh individual directive within the meaning of Article 16(1) of Directive 89/391/EEC). Official Journal L262, 17/10/2000, p. 0021-0045.

