

# Columbia Blood Agar



Medium used for the cultivation and determination of fastidious and non-fastidious microorganisms.

## • CONTENTS (Liter)

Pancreatic Digest of Casein	12.0 g
Peptic Digest of Animal Tissue	5.0 g
Yeast Extract	3.5 g
Beef Extract	3.0 g
Corn Starch	1.0 g
Sodium Chloride	5.0 g
Agar	13.5 g
Final pH = 7.3 ± 0.2 at 25°C	

## • PROCEDURE

Suspend 43.0 G of powder in 950 mL of distilled or deionized water. Heat to boiling until completely dissolved. Sterilize by autoclave at 121°C for 15 minutes. Cool to 45 - 50°C in water bath. Aseptically add 50 mL of Sheep Blood Defibrinated (MB-S1876). Mix well. Pour into petri dishes.

## • INTERPRETATION

Columbia Blood Agar is a medium used for the cultivation and determination of fastidious and non-fastidious microorganisms. Pancreatic digest of casein, peptic digest of animal tissue and beef extract provide carbon, nitrogen, vitamins and minerals. Yeast extract and corn starch serve as energy sources and supply vitamin B complex to the medium. Sodium chloride maintains the osmotic balance. Agar is the solidifying agent.

## • TECHNIC

Inoculate the specimen using a sterile loop to the medium. Incubate at 30 - 35°C for 48 hours under appropriate condition. Refer appropriate references for recommended test procedure.

## • QUALITY CONTROL FOR USE

### Dehydrated medium

Appearance: free-flowing, homogeneous

Color: beige

### Prepared medium

Appearance: opaque

Color: amber / cherry red (after addition of Sheep Blood Defibrinated)

Incubation conditions: 30 - 35°C / 48 hours under appropriate condition

Microorganism	ATCC	Inoculum CFU	Growth
<i>Escherichia coli</i>	8739	50-100	good
<i>Staphylococcus aureus</i>	6538	50-100	good
<i>Streptococcus pyogenes</i>	19615	50-100	good
<i>Streptococcus pneumoniae</i>	6305	50-100	good
<i>Clostridium sporogenes</i>	11437	50-100	good
<i>Clostridium sporogenes</i>	19404	50-100	good

**• STORE**

The powder is very hygroscopic. Store the powder at room temperature, in a dry environment, in its original container tightly closed and use it before the expiry date on the label. Store prepared medium at 2 - 8°C.

**• REFERENCES**

1. Ellner, P.D., C.J. Stoessel., E. Drakeford, and F. Vasi (1966). A new culture medium for medical bacteriology. Am. J.Clin. Path. 45, 502-504.
2. Isenberg, H.D. (ed.) (1992). Clinical microbiology procedures handbook, vol. 1 American Society for Microbiology, Washington, DC.

**• PACKAGE**

Cat. No : MB-C2146 Columbia Blood Agar	500 G
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