

# **COLUMBIA CNA AGAR BASE**

Selective medium for staphylococci, streptococci and pneumococci isolation.

TYPICAL FORMULA	(g/l)
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Peptospecial23.0Starch1.0Sodium Chloride5.0Agar14.0Colistin0.01Nalidixic Acid0.015Final pH =  $7.3 \pm 0.2$  at 25 °C.

## DIRECTIONS

Suspend 43.0 g of powder in 1 liter of distilled or deionized water. Heat until completely dissolved. Sterilize in autoclave at 121 °C for 15 minutes. Cool to 45-50 °C and add 5% defibrinated sterile sheep blood. Mix well. Distribute in petri dishes.

### DESCRIPTION

COLUMBIA CNA AGAR BASE is a selective medium for the isolation of staphylococci, streptococci, pneumococci.

#### TECHNIQUE

Inoculate the medium with the specimen using a sterile loop and incubate at  $36 \pm 1$  °C for 18-24 hours on 10% CO<sub>2</sub> atmosphere.

## QUALITY CONTROL

Dehydrated medium Appearance: free-flowing, homogeneous. Color: beige. <u>Prepared medium</u> Appearance: opaque. Color: cherry red. Incubation conditions: 36 ± 1 °C for 18-24 hours at 10% CO<sub>2</sub>.

Microorganism	ATCC	Growth	Characteristics
Streptococcus pyogenes	19615	good	β-hemolysis
Streptococcus pneumoniae	6303	good	a-hemolysis
Staphylococcus aureus	11204	good	β-hemolysis
Proteus mirabilis	12453	markedly inhibited	

### PERFORMANCE AND LIMITATIONS

Colistin and nalidixic acid inhibit the growth of the Gramnegative bacteria. The presence of blood allows to demonstrate the haemolytic characteristics of streptococci. Hemolytic reactions of some strains of Group D streptococci have been shown to be affected by differences in animal blood. Such strains are beta-hemolytic on horse and rabbit blood agar and alpha-hemolytic on sheep blood agar. Proteus species occasionally grow on CNA Agar and may initially be confused with streptococci because of the small size of the colonies.

#### STORAGE

The powder is very hygroscopic: store the powder at 10-30 °C, in a dry environment, tightly closed in its original container and use it before the expiry date on the label or until signs of deterioration or contamination are evident. Store prepared plates at 2-8 °C.



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## REFERENCES

1. Ellner, P.D., C.J. Stoessel, E. Drakeford, and F. Vasi (1986). A New Culture Medium for Medical Bacteriology. Am. J. Clin. Path. **45**, 502-504.

2. Ruoff , K.L.(1995). Streptococcus, p.299-305. In Manual of clinical Microbiology, 6th ed. American Society for Microbiology, Washington, D.C.

3. NCCLS document (1996) M22-A2: Approved Standard.

## PRESENTATION

Product	REF	Σ
COLUMBIA CNA AGAR BASE (11.6 I)	610113	500 g
COLUMBIA CNA AGAR BASE (2.3 I)	620113	100 g

## TABLE OF SYMBOLS

LOT Batch code	Caution, consult accompanying documents	Manufacturer	Contains sufficient for <n> tests</n>	IVD In Vitro Diagnostic Medical Device
REF Catalogue number	Fragile, handle with care	Use by	Temperature limitation	Keep away from heat source



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