

COLUMBIA BLOOD AGAR BASE

A multi-purpose non-selective medium for the cultivation of non-fastidious and fastidious micro-organisms according to ISO 10272.

Dehydrated media	
Code number:	500 g: COL20500, 5 kg: COL25000
Colour:	Yellowish
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving (25 °C):	7,1 – 7,5

Direction for Columbia Blood Agar: Suspend **42 g** in 950 ml of distilled water and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 121 °C for 15 minutes. Cool to 50 °C and add aseptically **50 ml of sterile defibrinated sheep blood**. Mix well before pouring.

Direction for Columbia Blood Agar + Ampicillin: Dissolve the contents of **one vial of Ampicillin (5 mg) Supplement (AMP80004)** with 4 ml of sterile distilled water and add aseptically to **500 ml of Columbia Blood Agar** at 50 °C. Mix well before pouring.

Direction for Columbia CNA Agar: Dissolve the contents of **one vial of Staph/Strep Selective Supplement (SHS80004)** with 4 ml of sterile distilled water and add aseptically to **500 ml of Columbia Blood Agar** at 50 °C. Mix well before pouring.

Direction for Gardnerella Selective Agar: Dissolve the contents of **one vial of Gardnerella Selective Supplement (GAS80004)** with 4 ml of sterile distilled water and add aseptically to **500 ml of Columbia Blood Agar** at 50 °C. Mix well before pouring.

Prepared media	
Bottled media bases:	100 ml: COL30100, 500 ml: COL30500
Plated Columbia Blood Agar:	55 mm: COL50055, 90 mm: COL50090
Plated Columbia Blood Agar + Ampicillin:	55 mm: COL50055-AM, 90 mm: COL50090-AM
Plated Gardnerella Selective Agar:	55 mm: COL50055-GA, 90 mm: COL50090-GA
Colour of bottled media bases:	Yellowish
Colour of plated media:	Ruby red
pH (25 °C):	7,2 – 7,4

Direction: Supplement the melted bottled media bases according to the direction of the dehydrated media and dispense aseptically into sterile Petri-dishes. Media in Petri-dishes are ready to use.

FORMULA in g/l

Nutrient substrate (peptones, extracts)	23
Starch, soluble	1
Sodium chloride	5
Agar	13

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature. Store the bottled media protected from light at room temperature. Store the plated media protected from light at 2-8 °C. Use before the expiry date on the label.

Quality control of Columbia Blood Agar:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 24 h
<i>Streptococcus pneumoniae</i> ATCC 49619		Good, alpha haemolysis (under micro-aerobic conditions)	
<i>Streptococcus pyogenes</i> ATCC 19615		Good, beta haemolysis (under micro-aerobic conditions)	
<i>Enterococcus faecalis</i> ATCC 29212		Good, without haemolysis	

Quality control of Columbia Blood Agar + Ampicillin:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 24 h
<i>Pseudomonas aeruginosa</i> ATCC 27853		Good	
<i>Streptococcus pyogenes</i> ATCC 19615		Inhibited (under micro-aerobic conditions)	

Quality control of Columbia CNA Agar:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 24 h
<i>Streptococcus pneumoniae</i> ATCC 49619		Good, alpha haemolysis (under micro-aerobic conditions)	
<i>Streptococcus pyogenes</i> ATCC 19615		Good, beta haemolysis (under micro-aerobic conditions)	
<i>Enterococcus faecalis</i> ATCC 29212		Good, without haemolysis	
<i>Escherichia coli</i> ATCC 25922		Inhibited	

Quality control of Gardnerella Selective Agar:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 48 h
<i>Gardnerella vaginalis</i> ATCC 14018		Good, beta haemolysis (under micro-aerobic conditions)	
<i>Proteus mirabilis</i> ATCC 29906		Inhibited	

References: Ellner et al. (1966) Am. J. Clin. Pathol. 45: 502.
ISO 10272-1:2017, ISO 10272-2:2017

In vitro diagnostic – for professional use only!