

PRODUCT INFORMATION

Product Type: PETRI DISHES 90mm

Cat No. PD013 - CHOCOLATE BLOOD AGAR + SUPPLEMENTS

Intended Use:

Chocolate Blood Agar with sheep blood is used for the isolation and cultivation of fastidious pathogens, particularly Neisseria and *Haemophilus* species, in clinical microbiology.

Principle and Uses:

For the non-selective cultivation of fastidious bacteria. Especially useful for the cultivation of *Haemophilus* and *Neisseria* in a CO₂ enriched atmosphere.

Contains an improved GC Agar base, 8.5% blood and Enrichment. The GC base contains nitrogenous nutrients in the form of casein and meat peptones, phosphate buffer to maintain pH and corn starch, which neutralizes toxic fatty acids that may be present in the agar. Sheep blood is lysed (chocolated) to release necessary growth factors. Blood is heated (chocolated) after addition to lyse red cells, releasing NAD (factor V) and hemin (factor X), making these nutrients available for fastidious organisms. Enrichment Supplement is critical for optimal growth and recovery of *Neisseria and Haemophilus spp*. Enrichment is a defined supplement which provides V factor (nicotinamide adenine dinucleotide, NAD) for *Haemophilus* species and vitamins, amino acids, co-enzymes, dextrose, ferric ion and other factors which improve the growth of pathogenic *Neisseria*.

Limitations

- 1. It is recommended that biochemical, immunological, molecular, or mass spectrometry testing be performed on colonies from pure culture for complete identification.
- 2. Chocolate Agar is an enriched medium, thus non-pathogenic organisms may overgrow pathogenic bacteria
- 3. The presence or absence of *N. gonorrhoeae* in a specimen does not rule out the possible presence of other pathogenic organisms.

Composition

Chocolate Blood Agar + Supplements:

Casein Peptone - 7.5 g/L

Corn Starch - 1.0 g/L

Meat Peptone - 7.5 g/L

Monopotassium Phosphate - 1.0 g/L

Sodium Chloride - 5.0 g/L

Agar - 10.0 g/L

Dipotassium Phosphate - 4.0 g/L

Donor Sheep Blood - 8-9%

Supplements:
Glucose - 2.0 g/L
Vitamin - B12 0.2 mg/L
Adenine - 20.0 mg/L
L-Glutamine - 200.0 mg/L
Guanine - 0.6 mg/L
p-Aminobenzoic acid - 0.26 mg/L
L-Cystine - 22.0 mg/L
NAD (Coenzyme 1) - 5.0 mg/L
Cocarboxylase - 2.0 mg/L
Iron (III) nitrate - 0.4 mg/L
Thiamine hydrochloride - 0.6 mg/L
Cysteine hydrochloride - 518.0 mg/L

Storage: 2-8°C

Appearance: chocolate - brown

pH Range: 7.2 - 7.6

Package contents: 10 plates in a package Exp. Date: Printed on label and on the item.

Required materials not supplied: Laboratory equipment as required.

Warning and Precautions - For professional use only. Follow good microbiological lab practices while handling specimens and culture. Do not use Petri dishes if they show evidence of microbial contamination, discoloration, drying, cracking, or other signs of deterioration. Avoid freezing and overheating. The Petri Dishes may be used / inoculated up to the expiration date and incubated for the recommended incubation times. After use and prior to discarding, specimen containers and all contaminated material, including the used culture media and contaminated culture containers, must be sterilized or incinerated by validated procedures. Since the nutritional requirements of organisms vary, some strains may be encountered that fail to grow or grow poorly on this medium.

If excessive moisture is observed, invert the bottom over an off-set lid and allow to air dry in order to prevent formation of a seal between the top and bottom of the plate during incubation. Storage Instructions: On receipt, store plates in the dark at 2–8 °C. Avoid freezing and overheating. Do not open until ready to use.

Implementation Date: 01/10/25

Version Number: 01

Waste Disposal

After interpretation all plates should be destroyed by standard incineration methods.

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Performance Testing Results:

GPT: inoculum 10-100 cfu

TEST	ATCC	Incubation Temp. (°C)	Incubation Cond.	Reaction 1	
Neisseria gonorrhoeae	49226	33-37 °C	5% CO2, 24 hours	Growth	
Neisseria meningitidis	13090	33-37 °C	5% CO2, 24 hours	Growth	
Streptococcus pneumoniae	49619	33-37 °C	5% CO2, 24 hours	Growth	Alpha hemolytic reaction
Haemophilus influenzae	49766	33-37 °C	5% CO2, 24 hours	Growth	
Haemophilus influenzae	49247	33-37 °C	5% CO2, 24 hours	Growth	

Incubate plates at $35 \pm 2^{\circ}$ C for 24 / 48 hours, in an aerobic atmosphere supplemented with 5% carbon dioxide.