

TM 1960 – ANAEROBIC BLOOD AGAR BASE

INTENDED USE

For cultivation of anaerobic microorgansisms, including very fastidious organisms from clinical specimens.

PRODUCT SUMMARY AND EXPLANATION

Anaerobic Blood Agar base serves as a nutritious, nonselective medium allowing the cultivation of not only fastidious anaerobes but also of aerobic and microaerophillic microorganisms. It promotes both typical pigment formation in *Bacteroides melaningenicus* and displays double haemolytic reaction in *Clostridium perfringens* with added blood to the medium base. The inner zone of haemolysis is due to toxin and the outer zone of incomplete haemolysis to toxin (lecithinase activity).

COMPOSITION

Ingredients	Gms / Ltr		
Tryptone	15.000		
Soya peptone	5.000		
Yeast extract	5.000		
Sodium chloride	5.000		
L-Cysteine	0.500		
Hemin	0.005		
Agar	13.500		

PRINCIPLE

Tryptone, soya peptone and yeast extract in the medium provides carbon and nitrogenous source, long chain amino acids, vitamins and other essential nutrients. Presence of Hemin and Vitamin K1 supports the growth of typical fastidious bacteria like *Bacteroides* species and gram positive spore bearers like Clostridium species. Addition of blood provides nutrients and helps to differentiate haemolytic organisms. Sodium chloride helps in maintaining the osmotic equilibrium.

INSTRUCTION FOR USE

- Dissolve 44.0 grams in 1000 ml purified / distilled water.
- Heat to boiling to dissolve the medium completely.
- Add the rehydrated contents of 1 vial of Vitamin K1 solution.
- Sterilize by autoclaving at 15 psi pressure (121°C) for 15 minutes.
- Cool to 45 50°C. Aseptically add 5% v/v sterile defibrinated sheep blood.
- Mix well and pour into sterile petri plates.

QUALITY CONTROL SPECIFICATIONS

Appearance of Powder: Yellow to tan coloured homogeneous free flowing powder.Appearance of prepared medium: Basal medium : Yellow coloured; with addition of 5% v/v sterile, defibrinated
sheep blood : cherry red coloured Basal medium : slightly opalescent; After
addition of 5% v/v sterile, defibrinated sheep blood : opaque gel in petri plates.pH (at 25°C): 7.4±0.2

foins

INTERPRETATION

Cultural characteristics observed after incubation with 5-10% CO₂.

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Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Recovery	Incubation Temperature	Incubation Period
Bacteroides fragilis	25285	50-100	Luxuriant	>=70%	35-37°C	24-48 Hours
Bacteroides melaninogenicus	25611	50-100	Luxuriant	>=70%	35-37°C	24-48 Hours
Peptostreptococcus anaerobius	27337	50-100	Luxuriant	>=70%	35-37°C	24-48 Hours

PACKAGING:

In pack size of 500 gm bottles.

STORAGE

Dehydrated powder, hygroscopic in nature, store in a dry place, in tightly-sealed containers between 25-30°C and protect from direct sunlight. Under optimal conditions, the medium has a shelf life of 4 years. When the container is opened for the first time, note the time and date on the label space provided on the container. After the desired amount of medium has been taken out replace the cap tightly to protect from hydration.

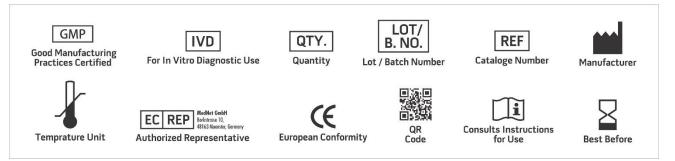
Product Deterioration: Do not use if they show evidence of microbial contamination, discoloration, drying or any other signs of deterioration.

DISPOSAL

After use, prepared plates, specimen/sample containers and other contaminated materials must be sterilized before discarding.

REFERENCES

- 1. Dowell, Jr., V.R., Lombard, G.L, Thompson, F.S, Armfield, A.Y.: Media for isolation, characterization and identification of obligately anaerobic bacteria-US Department of Health and Human services, centers for Disease Control (1977).
- 2. Isenberg, H.D. Clinical Microbiology Procedures Handbook 2nd Edition.
- 3. Jorgensen, J.H., Pfaller, M.A., Carroll, K.C., Funke, G., Landry, M.L., Richter, S.S and Warnock., D.W. (2015) Manual of Clinical Microbiology, 11th Edition. Vol. 1.



NOTE: Please consult the Material Safety Data Sheet for information regarding hazards and safe handling Practices. *For Lab Use Only Revision: 08 Nov., 2019

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