

Product Data Sheet

BLOOD AGAR BASE (INFUSION AGAR)

Product No. GB-DCM-00092-1A

INTENDED USE

For isolation and cultivation of fastidious pathogenic microorganisms after addition of blood.

PRODUCT SUMMARY

Blood Agar Base is a highly nutritious medium generally used as a basal medium for preparing blood agar by supplementation with blood. It can also be used as general-purpose media without the addition of blood. Blood Agar Base media can be used with added phenolphthalein phosphate for the detection of phosphate producing Staphylococci, with added salt and agar for assessment of surface contamination on equipment and pig carcass and to determine salinity range of marine Flavobacteria. It can also be used for preparation of Salmonella Typhi antigens. Blood Agar Base is recommended by APHA and Standard Methods for testing of food samples. Addition of blood makes the medium more nutritious by providing additional growth factors required by fastidious organisms. It also helps in visualizing the haemolytic reactions. However, haemolytic reactions depend on the animal blood used. Sheep blood gives best results for Group A Streptococci. But sheep blood fails to support growth of Haemophilus haemolyticus since sheep blood is deficient in pyridine nucleotides. However, when horse blood is used H. haemolytic colonies produce haemolysis and mimic Streptococcus pyogenes.

Product Specifications

Ingredients	Gms / Ltr
Beef heart peptone	10.000
Tryptose	10.000
Sodium chloride	5.000
Agar	15.000

PRINCIPLE

Beef heart peptone and tryptose provides carbon, nitrogen, amino acids and vitamins. Sodium chloride helps in maintaining the osmotic equilibrium of the medium.



INSTRUCTION FOR USE

- Dissolve 40.0 grams in 1000 ml purified/distilled water.
- Heat to boiling to dissolve the medium completely.
- Sterilize by autoclaving at 15 psi pressure (121°C) for 15 minutes.
- Cool to 45-50°C and aseptically add 5% v/v sterile defibrinated blood.
- Mix well and pour into sterile Petri plates.

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.

QUALITY CONTROL SPECIFICATIONS

Appearance of Powder: Cream to yellow homogeneous free flowing powder. Appearance of prepared medium: Basal medium: Light amber coloured clear to slightly opalescent gel. After addition of 5% v/v sterile defibrinated blood : Cherry red coloured opaque gel forms in Petri plates.

pH (at 25°C) : 7.3±0.2



Microorga nism	ATCC	Inoculum (CFU/ ml)	Gro wth	Recove ry	Growth with blood	Recove ry with blood	Haemoly sis	Incubati on Temperatu re	Incubati on Period
Neisseria meningitidis	13090	50-100	Fair	20- 30%	Luxuri ant	>=70%	None	35-37°C	18-48 Hours
Staphyloco ccus aureus subsp. aureus	25923	50-100	Good	40- 50%	Luxuri ant	>=70%	Beta	35-37°C	18-48 Hours
Staphyloco ccus epidermidi s	12228	50-100	Good	40- 50%	Luxuri ant	>=70%	None	35-37°C	18-48 Hours
Streptococ cus pneumoniae	6303	≥1000	Fair- good	20- 40%	Luxuri ant	>=70%	Alpha	35-37°C	18-48 Hours
Streptococ cus pyogenes	19615	50-100	Fair- good	20- 40%	Luxuri ant	>=70%	Beta	35-37°C	18-48 Hours

This product is for research use only.