CM 20272 – BLOOD AGAR BASE NO. 2 WITH 1.2% AGAR

INTENDED USE

Especially topermit the maximum recovery of fastidious pathogenic microorganisms without interfering with their haemolytic reaction.

PRODUCT SUMMARY AND EXPLANATION

A fastidious organismis onewith complete nutritional requirements, needing additional cellular building-block molecules in order to survive. This media is a highly nutritive, microorganisms producing haemolysin give visible haemolytic zones on this medium. It also serves as a differential medium for Brucella and Campylobacter species by adding different antibiotic supplements for the respective bacteria. Brucella cultures are highly infective and must be handled with care. Incubate preferably in 5-10% carbon dioxide atmosphere. Comparative studies of horse, rabbit and sheep blood showed that sheep blood gave the clearest and most reliable colony and haemolysis characteristics at both 24 and 48 hours of incubation.

COMPOSITION

Ingredients	Gms / Ltr
Protease peptone	15.000
Liver extract	2.500
Yeast extract	5.000
Sodium chloride	5.000
Agar	12.000

PRINCIPLE

Themediumcontains liver extract and yeast extract helps enhance the growth and haemolytic reactions of fastidious organisms like Streptococci and Pneumococci. Proteose peptone serves as the nitrogen source while HL extract and yeast extract provide essential carbon, vitamin, nitrogen and amino acid sources. Sodium chloride maintains the osmotic equilibrium. Supplementation with blood (5-10%) provides additional growth factors and also serves as basis for determining haemolytic reactions. Haemolytic patterns may vary with the source of animal blood or type of base medium used.

INSTRUCTION FOR USE

Add 39.5gm powder to distilled/deionized water.
Bring volume to 1.0 liter and mix thoroughly.
Heat gently and bring to boiling.
Autoclave at 15 psi pressure at 121°C for 15 minutes.
Cool to 40-50°C and aseptically add 5-10% streile defrininated blood.
For Brucella species: Add rehydrated contents of 2 vial of Brucella Selective Supplement (TS 006) to 1000 ml sterile molten base.
For Campylobacter species: Add rehydrated contents of 2 vial of Campylobacter Supplement-I (TS 007) or Campylobacter Supplement-II (TS 008) or Campylobacter Supplement-III (TS 009) or Campylobacter Growth Supplement (TS 010) to 1000 ml sterile molten base.

- For Streptococcus species: Add rehydrated contents of 2 vial of Strepto Supplement (TS 011) to 1000 ml sterile molten base. Mix well and pour into sterile Petri plates.

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) : 7.4 ± 0.2

INTERPRETATION

Culturalcharacteristics observed after incubation.

Microorganism	ATCC	Inoculum	Growth w/o blood	Recovery w/o blood	Growth with blood	Recovery with blood	Haemolysis	Incubation Temperature	Incubation Period
Streptococcus pneumoniae	6303	50-100	Fair-good	20-40%	Luxuriant	>=70%	Alpha	35-37°C	18-48 Hours
Streptococcus pyogenes	19615	50-100	Fair-good	20-40%	Luxuriant	>=70%	Beta	35-37°C	18-48 Hours
Staphylococcus aureus subsp	25923	50-100	Good	40-50%	Luxuriant	>=70%	Beta	35-37°C	18-48 Hours
Neisseria meningitidis	13090	50-100	Fair	20-30%	Luxuriant	>=70%	Beta	35-37°C	18-48 Hours

PACKAGING:

Inpacksizeof500 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

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

REFERENCES

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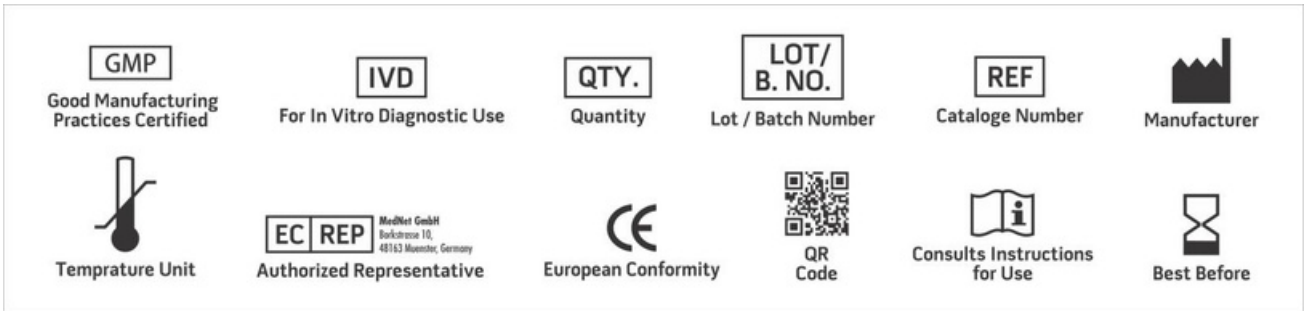

NOTE: Please consult the Material Safety Data Sheet for information regarding hazards and safe handling Practices.

*For LabUse Only