CM 20320 – BRUCELLA BROTH BASE

INTENDED USE

For cultivation & enrichment of Brucella or Campylobacter species.

PRODUCT SUMMARY AND EXPLANATION

Brucella Broth Base is formulated so astosupport luxuriant growth of fastidious bacteria like Brucella species. Brucella is an intracellular parasite that causes epizootic abortions in animals and septicemic febrile illness or localized infections of bone, tissue or organ systems in humans. Brucella species are highly fastidious and therefore require a nutrient rich medium to be able to grow. Also, Brucella species are highly infective and so extreme care should be taken while handling. The basal medium (with addition of Campylobacter Supplements) can be also used for the isolation of Campylobacter. For selective isolation of Brucella species, antibiotic mixtures are incorporated into the base. When non-selective medium is required, Brucella Broth Base may be employed with the addition of serum only (i.e. without antibiotics). It is suggested that half the tubes to be incubated in the normal atmosphere, and half in a 10% CO_2 enriched atmosphere. Brucella species are highly infectious and so extreme care should be taken while handling.

COMPOSITION

Ingredients	Gms / Ltr
Tryptone	10.000
Peptone	10.000
Yeast extract	2.000
Dextrose (Glucose)	1.000
Sodium chloride	5.000
Sodium bisulphite	0.100

PRINCIPLE

Peptone and tryptone provide nitrogenous and carbonaceous compounds, long chain amino acids, vitamins and other nutrients to the organisms. Yeast extract also supply some nitrogenous nutrients but mainly it serves as a source of Vitamin B complex. Dextrose serves as an energy source. It can be enriched with 5% v/v sterile defibrinated horse blood.

INSTRUCTIONFOR USE

Dissolve 14.05grams in 500 ml purified / distilled water.
Heat if necessary 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 sterile 5% v/v inactivated horse serum, Inactivate, by heating at 56°C for 30 minutes) and add rehydrated contents of one vial of Brucella Selective Supplement.
Mix well before pouring into sterile tubes.
For Campylobacter: Aseptically add sterile rehydrated contents of 1 vial of Campylobacter Supplement I(Blaser Wang) or Campylobacter Supplement II (Butzler) or Campylobacter Supplement III (Skirrow) and Campylobacter Growth Supplement to 500 ml of sterile medium.

QUALITY CONTROL SPECIFICATIONS

Appearance of Powder : Cream to yellow homogeneous free flowing powder.
Appearance of prepared medium : Light amber coloured, clear solution in tubes
pH (at 25°C) : 7.0±0.2

INTERPRETATION

Culturalcharacteristics observed after incubation, under 10% Carbon dioxide with added 5%v/v inactivated horse serum and Brucella Selective Supplement.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Incubation Temperature	Incubation Period
Brucella melitensis	4309	50-100	Luxuriant	35-37°C	24-72 Hours
Escherichia coli	25922	>=10^4	Inhibited	35-37°C	24-72 Hours
Staphylococcus aureus subsp. aureus	25923	>=10^4	Inhibited	35-37°C	24-72 Hours

PACKAGING:

Inpacksizeof100 gm and 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

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

REFERENCES

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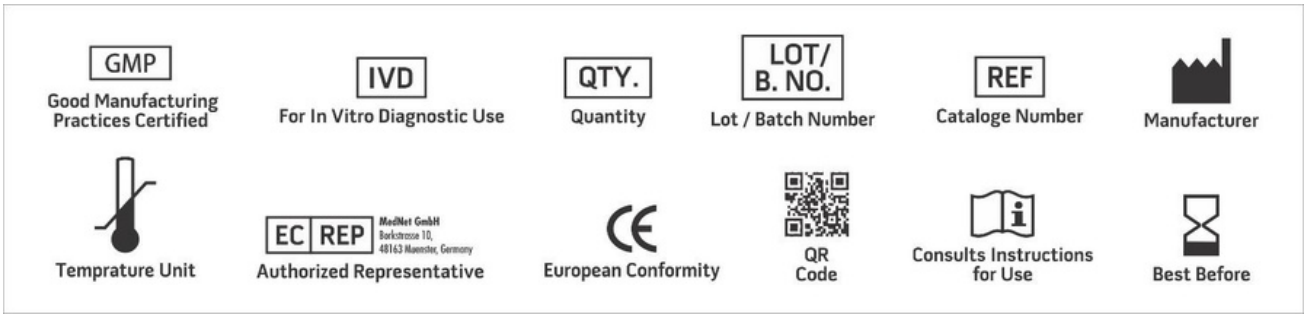

NOTE: Please consult the Material Safety Data Sheet for information regarding hazards and safe handling Practices.

*For LabUse Only