CM 20319 – BRUCELLA AGAR BASE, MODIFIED

INTENDED USE
For cultivation of Campylobacter species.

PRODUCT SUMMARY AND EXPLANATION
Thismedium isformulatedso as tosupportluxuriant growth of fastidious bacteria like Campylobacter and Brucella species. For selective isolation of Brucella species, antibiotic mixtures are incorporated into the base. Farrel and Robinson formulated a highly selective antibiotic medium. Ethyl violet and Circulin, which were recommended originally, are no longer used. 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 in case of broth medium that half the tubes 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. All presumptive anaerobic organisms must be further confirmed by the tests.

COMPOSITION

Ingredients	Gms / Ltr
Tryptone	15.000
Peptone	5.000
Yeast extract	2.000
Dextrose (Glucose)	1.000
Sodium chloride	5.000
Sodium citrate	1.000
Sodium bisulphite	0.100
Agar	15.000

PRINCIPLE
Peptone, Tryptone provide organic nitrogen 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 22.05 gramsin 500 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 sterile 5% v/v inactivated horse serum.
Inactivate by heating at 56°C for 30 minutes) and rehydrated contents of one vial of Campylobacter Supplement III
- (Skirrow) and sterile reconstituted contents of one vial of Campylobacter Growth Supplement.
Mix well before pouring into sterile petri plates.

QUALITY CONTROL SPECIFICATIONS

Appearance of Powder : Cream to yellow coloured homogeneous free flowing powder.
Appearance of prepared medium : Yellow coloured clear to slightly opalescent gel or solution forms in petri plates.
pH (at 25°C) : 7.0±0.2

INTERPRETATION

Culturalcharacteristics observed after incubation under 10% CO_2 with added sterile 5% v/v inactivated horse serum

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Recovery	Incubation Temperature	Incubation Period
Campylobacter jejuni	29428	50-100	Good-luxuriant	>=50%	35-37°C	24-48 Hours
Campylobacter coli	33559	50-100	Good-luxuriant	>=50%	35-37°C	24-48 Hours
Escherichia coli	25922	>=10^4	Inhibited	0%	35-37°C	24-48 Hours
Staphylococcus aureus subsp. aureus	25923	>=10^4	Inhibited	0%	35-37°C	24-48 Hours

PACKAGING:

Inpacksizeof500 gm bottles.

STORAGE

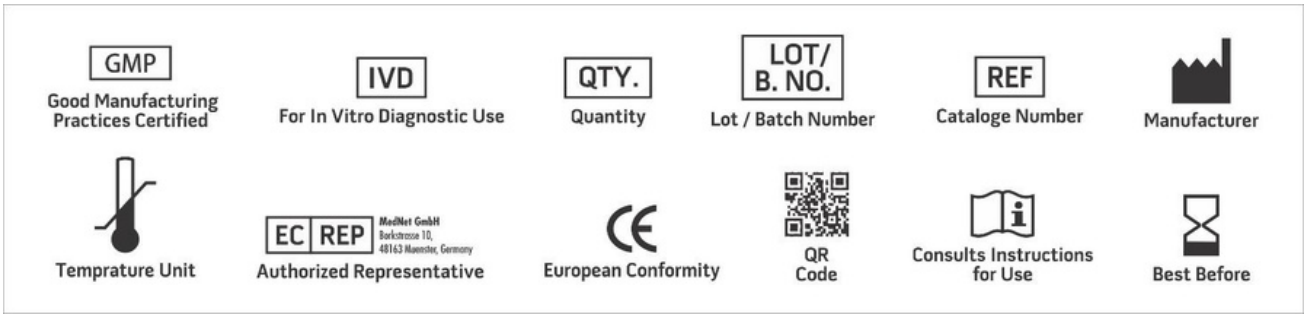
Dehydrated powder, hygroscopic in nature, store in a dry place, in tightly-sealed containers between 25-30°C and protect from direct sunlight. Under optimal conditions, the medium has a shelf life of 4 years. When the container is opened for the first time, note the time and date on the label space provided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

1. Alton G.G. and Jones L.M., 1967, Lab Technique in Brucellosis WHO, Geneva.
2. Farrell I.D. and Robinson L., 1972, J.Appl. Bact., 35:625.
3. Finegold et al (Ed.), 1990, Bailey and Scotts Diagnostic Microbiology, 8th ed., The C.V. Mosby Co., St. Louis.
4. Jones L. M. and Brinley M.W.J., 1958, Bull. Wld. Hlth. Org., 19:200.
5. Kuzdas C.D., and Morse E.V., 1953, J. Bact., 66 (4):502. 8. Renoux G., 1954, Ann. Inst. Pasteur, 87 (3):325.



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

*For LabUse Only