CM 20389 – CASITOSE BROTH

INTENDED USE

For production of staphylococcal enterotoxin for use in Cat test and in serological studies.

PRODUCT SUMMARY AND EXPLANATION

CasitoseBroth (Casein Hydrolysate Broth) was developed by Casman and is used for production of Staphylococcal enterotoxin for use in the cat test and in serological studies. As described in APHA, Staphylococci to be tested for enterotoxigenicity should be subcultured into the tubes of Casitose Broth (Casein Hydrolysate Broth) and incubated in an atmosphere containing 30% Carbon - dioxide for 18 - 24 hours at 35°C. Growth obtained by this method is then transferred from each tube in three ml amounts to duplicate flasks containing 100 ml Casitose Broth and the flasks should be incubated as mentioned above for three days. The broth cultures are then centrifuged and supernatant fluid is sterilized by Seitz filtration. The filtrates are then tested for alpha and beta haemolysins and if present then the toxins are denatured by heat or by neutralization with antiserum. After denaturation, filtrates can be injected in the cats to observe if vomiting is induced. Casitose Broth can be solidified with the addition of agar and the cultures grown are used for tests on other animals and in analysis of antigen-antibody systems by agar diffusion technique.

COMPOSITION

Ingredients	Gms / Ltr
Acicase	20.000
Ferric citrate	0.025
Potassium dihydrogen phosphate	2.000
Magnesium sulphate	0.200
L-Cystine	0.025
Sodium acetate	7.000
L-Tryptophan	0.075
Calcium pantothenate	0.0005
Thiamine	0.00004
Nicotinic acid (Niacin)	0.0012

PRINCIPLE

Acicase and yeast extract provide necessary nitrogenous source, for growth of E.coli. Salts in the medium that is sodium chloride and dipotassium phosphate maintains osmotic balance of the cell.

INSTRUCTION FOR USE

Dissolve 29.33grams in 1000 ml purified / distilled water.
Mix thoroughly. Heat with frequent agitation and boil for one minute. Dispense as desired.
Sterilize by autoclaving at 15 psi pressure (121°C) for 15 minutes.

QUALITY CONTROL SPECIFICATIONS

Appearance of Powder : Cream to yellow coloured homogeneous free flowing powder.
Appearance of prepared medium : Light to medium amber coloured clear to slightly opalescent solution with slight precipitate.
pH (at 25°C) : 7.3±0.2

INTERPRETATION

Culturalcharacteristics observed after incubation.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Incubation Temperature	Incubation Period
Enterococcus faecalis	29212	50-100	Luxuriant	35-37°C	18-24 Hours
Staphylococcus aureus subsp. aureus	25923	50-100	Luxuriant	35-37°C	18-24 Hours

PACKAGING:

Inpacksizeof500 gm bottles.

STORAGE

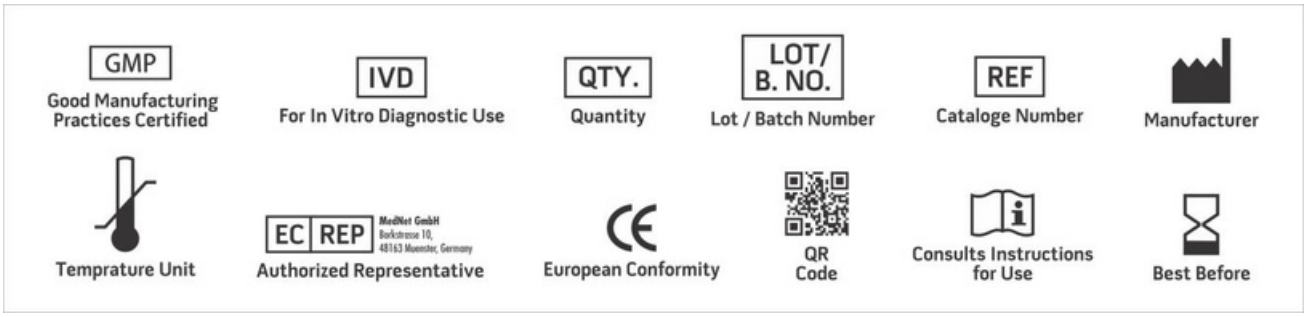
Dehydrated powder, hygroscopic in nature, store in a dry place, in tightly-sealed containers between 25-30°C and protect from direct sunlight. Under optimal conditions, the medium has a shelf life of 4 years. When the container is opened for the first time, note the time and date on the label space provided 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.Casman, 1958, Public Health Reports, 73:599.
2.Casman, 1960, J. Bact., 79:849.
3. Isenberg, H.D. Clinical Microbiology Procedures Handbook. 2nd Edition.
4. 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.
5.Standard Methods for the Examination of Dairy Products, 1960, 11th ed., American Public Health Association, Inc. New York, 1960.



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

*For LabUse Only