

TM 694 – CASEIN HYDROLYSATE YEAST EXTRACT BROTH (CAYE) (CASAMINO ACID YEAST EXTRACT BROTH)

INTENDED USE

For use in cultivation of *Vibrio cholerae* while testing their enterotoxigenicity.

PRODUCT SUMMARY AND EXPLANATION

Vibrio cholerae, a gram-negative bacterium is the causative agent of cholera outbreaks and epidemics. It is characterized by various biochemical properties and antigenic types. It can be differentiated from other halophilic *Vibrio* species because of its obligate requirement for sodium ion. Isolates of *V.cholerae* or *V.mimicus*, determined either biochemically or serologically, should be further tested for the production of cholera enterotoxin (CT) or cytotoxins. Casein Hydrolysate Yeast Extract Broth is formulated as per APHA for cultivating *Vibrio cholerae* while testing their enterotoxigenicity as these media enhance the production of *Vibrio* enterotoxin.

Inoculate test cultures from TN Agar slants to tubes of CAYE Broth and incubate overnight at $30^{\circ} \pm 2^{\circ}\text{C}$ which is further used for immunological testing of enterotoxigenicity.

COMPOSITION

Ingredients	Gms / Ltr
Casein acid hydrolysate	30.000
Yeast extract	4.000
Dipotassium phosphate	0.500
Dextrose	2.000

PRINCIPLE

The medium contents like casein acid hydrolysate and yeast extract provide the essential nitrogenous nutrients and B-vitamins to the growing *Vibrios*. Dextrose is the fermentable carbohydrate. Dipotassium phosphate helps buffers the medium.

INSTRUCTION FOR USE

- Dissolve 36.5 grams in 1000 ml distilled water.
- Heat if necessary to ensure complete solution.
- Dispense and sterilize by autoclaving at 15 psi pressure (121°C) for 15 minutes.

QUALITY CONTROL SPECIFICATIONS

Appearance of Powder	: Cream to yellow homogeneous free flowing powder.
Appearance of prepared medium	: Amber coloured, clear solution without any precipitate.
pH (at 25°C)	: 7.2 ± 0.2

INTERPRETATION

Cultural characteristics observed after incubation.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Incubation Temperature	Incubation Period



<i>Vibrio cholerae</i>	15748	50-100	Good-luxuriant	32°C	18-24 Hours
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PACKAGING:

In pack size of 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

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

REFERENCES

- Singleton F. L., Atwell R., Jangi S., and Clowell R. R., 1982, Appl. Environ. Microbiol., 44:1047.
- Downes F. P. and Ito K., (Eds.), 2001, Compendium of Methods for the Microbiological Examination of Foods, 4th Ed., APHA, Washington, D.C.

 GMP Good Manufacturing Practices Certified	 IVD For In Vitro Diagnostic Use	 QTY. Quantity	 LOT/ B. NO. Lot / Batch Number	 REF Catalogue Number	 Manufacturer
 Temperature Unit	 EC REP Authorized Representative <small>MedNet GmbH Borkstrasse 10, 48163 Münster, Germany</small>	 European Conformity	 QR Code	 Consults Instructions for Use	 Best Before

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

***For Lab Use Only**
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