

TECHNICAL DATA SHEET

Casitose Yeast Extract Broth (CAYE)

Principle

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 (1). 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. Casitose Yeast Extract Broth is formulated as per APHA (2) for cultivating **Vibrio cholerae** while testing their enterotoxigenicity as these media enhance the production of **Vibrio** enterotoxin. The medium contents like **Acicase™** and yeast extract provide the essential nitrogenous nutrients and B-vitamins to the growing **Vibrio**'s. Dextrose is the fermentable carbohydrate. Dipotassium phosphate helps buffers the medium. Inoculate test cultures from **TN Agar (M950)** 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.

Use: For cultivation of **Vibrio cholerae** cultures while testing their enterotoxigenicity.

Contents*

Ingredients	Grams/ltr
Acicase	30.000
Yeast extract	4.000
Dipotassium hydrogen phosphate	0.500
Dextrose (Glucose)	2.000
Final pH (at 25°C)	7.2±0.2

*** Formula adjusted for optimum performance and parameters**

Equivalent to casein acid hydrolysate

Directions: Suspend 36.5 grams in 1000 ml purified/distilled water. Heat if necessary to dissolve the medium completely. Dispense in tubes or flasks as desired. Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes.

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Specimens' types analyzed

Clinical samples - Stool samples; Food samples.

Precautions to be taken

All the handling, experiments, storage, and discarding should be performed with the help of skilled and knowledgeable technicians and as per the established guidelines. The material should be disposed only after proper sterilization by autoclaving. Please go through the MSDS of the media to avoid any accidents or in emergency.

Performance and Evaluation

The expected performance of the medium is liable to use as per the direction on the label when stored at optimum conditions and within expiry date.

Quality Control

Appearance	Cream to yellow homogeneous free flowing powder
Reaction of 3.65% solution	7.2±0.2 at 25 °C
pH	7.00-7.40
Color and clarity of ready medium	Amber coloured, clear solution without any precipitate

Different Microbial Response

Cultural characteristics observed after an incubation at 32°C for 18-24 hours.

Organism	ATCC	Inoculum (CFU)	Growth
<i>Vibrio cholerae</i>	15748	50-100	Good - Luxuriant

Storage and Shelf Life: The product is highly hygroscopic; keep the container tightly closed at all times and store it properly as per the conditions mentioned on the label. The declared expiry is valid only when stored as per the conditions mentioned on the label.

Note: Sterilize media immediately after reconstitution.

Disposal: To avoid the contamination or propagation of any hazardous microbes the used, unusable or modified preparation of this product must be disposed after autoclaving after completion of task.

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Reference

1. Salfinger Y., and Tortorello M.L., 2015, Compendium of Methods for the Microbiological Examination of Foods, 5th Ed., American Public Health Association, Washington, D.C.
2. Singleton F. L., Atwell R., Jangi S., and Clowell R. R., 1982, Appl. Environ. Microbiol., 44:1047
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.

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