

## TM 2033 – CASITOSE YEAST EXTRACT BROTH (CAYE)

### INTENDED USE

For cultivation of *Vibrio cholerae* cultures 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. Casitose 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° ± 2°C which is further used for immunological testing of enterotoxigenicity.

### COMPOSITION

| Ingredients                    | Gms / Ltr |
|--------------------------------|-----------|
| Acicase                        | 30.000    |
| Yeast extract                  | 4.000     |
| Dipotassium hydrogen phosphate | 0.500     |
| Dextrose (Glucose)             | 2.000     |

### PRINCIPLE

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.

### INSTRUCTION FOR USE

- Dissolve 36.5 grams in 1000 ml purified / distilled water.
- Heat if necessary to ensure complete solution.
- Dispense into tubes or flasks as desired. 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       |



**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**

1. Isenberg, H.D. Clinical Microbiology Procedures Handbook 2nd Edition.
2. 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.
3. 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.
4. Singleton F. L., Atwell R., Jangi S., and Clowell R. R., 1982, Appl. Environ. Microbiol., 44:1047

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