

TM 1164 – CRAIG'S MEDIUM

INTENDED USE

For cultivation of *Vibrio cholerae* to determine its enterotoxigenicity.

PRODUCT SUMMARY AND EXPLANATION

Vibrio cholerae is a gram-negative bacterium that causes cholera in humans. Cholera is the prototype of diarrheal syndromes in which the disease is caused through the production of toxins that interrupt normal intra-intestinal exchange of water and electrolytes. A variety of laboratory diagnosis of cholera and toxin detection have been developed. Craigs Medium has similar composition to that of CAYE Broth, which was formulated as per APHA for cultivating *V.cholerae* while testing their enteropathogenicity.

For testing the enterotoxin production of *V.cholerae*, the culture is to be grown in Craigs Medium as this medium enhances the production of *Vibrio* enterotoxin. Inoculate test cultures from TN Agar slants to tubes of Craigs Medium and incubate overnight at $30 \pm 2^{\circ}\text{C}$ which is then further used for immunological testing of enterotoxigenicity.

COMPOSITION

Ingredients	Gms / Ltr
Acicase	30.000
Yeast extract	4.000
Dipotassium hydrogen phosphate	0.500

PRINCIPLE

Medium contents like Acicase and yeast extract provide the essential nitrogenous nutrients and B-complex vitamins to the growing *Vibrio*'s. Dipotassium hydrogen phosphate helps in maintaining buffering conditions in the medium. Glucose is the energy source.

INSTRUCTION FOR USE

- Dissolve 34.5 grams in 1000 ml purified / distilled water.
- Heat if necessary to ensure complete solution.
- Dispense and sterilize by autoclaving at 15 psi pressure (121°C) for 15 minutes. Cool to $45-50^{\circ}\text{C}$.
- Aseptically add 2 ml of filter sterilized 20% glucose solution per 100 ml. Mix well.

QUALITY CONTROL SPECIFICATIONS

Appearance of Powder	: Light yellow to beige 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	25-30°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

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.

 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 Birkstrasse 10 48163 Muenster, 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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