

CM 20883 – L-LYSINE DECARBOXYLASE SALINE BROTH (ISO 21872-1-2017)

INTENDED USE

Recommended for biochemical confirmation of *Vibrio parahaemolyticus* and *Vibrio cholerae* from food and animal feeding stuffs on the basis of lysine decarboxylation.

PRODUCT SUMMARY AND EXPLANATION

Vibrioparahaemolyticus is a halophilic estuarine organism. This organism can be isolated from a variety of sea food product and marine environments. The organism, when isolated from fresh sea food, is usually found in low number and is sensitive to refrigeration and heat. This medium is recommended by ISO for biochemical identification of *Vibrio parahaemolyticus* and *Vibrio cholerae* on the basis of lysine decarboxylation from food and animal feeding stuff, and environmental samples in areas of food manufacturing and food handling.

COMPOSITION

Ingredients	Gms / Ltr
Yeast extract	3.000
L-Lysine monohydrochloride	5.000
Glucose (Dextrose)	1.000
Sodium chloride	10.000
Bromocresol purple	0.015

PRINCIPLE

The medium consists of Yeast extract which provide nitrogen and carbon compounds, growth factors essential for the growth of *Vibrio* species. Sodium chloride maintains osmotic balance and facilitate easy growth of *Vibrio* species. Glucose is the fermentable carbohydrate and bromocresol purple is the pH indicator.

INSTRUCTION FOR USE

Dissolve 19.01 grams in 1000 ml purified / distilled water.

Heat, if necessary, to dissolve the medium completely.

Dispense the medium in quantities of approximately 2ml to 5ml into narrow test tube.

Sterilize by autoclaving at 15 psi pressure (121° C) for 15 minutes.

QUALITY CONTROL SPECIFICATIONS

Appearance of Powder	: Light yellow to greenish yellow homogeneous free flowing powder.
Appearance of prepared medium	: Purple coloured clear solution forms in tubes.
pH (at 25°C)	: 6.8 ± 0.2

INTERPRETATION

Cultural characteristics observed after incubation. (Inoculated tubes are overlaid with sterile mineral oil).

Microorganism	ATCC	Inoculum (CFU/ml)	Lysine decarboxylation	Incubation temperature	Incubation Period
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Vibrio vulnificus	27562	50-100	Positive (Purple colour with turbidity)	35-37°C	20-28 Hours
Vibrio mimicus	33653	10-100	Positive (Purple colour with turbidity)	35-37°C	24-28 Hours
Vibrio alginolyticus	17749	50-100	Positive (Purple colour with turbidity)	35-37°C	24-28 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.

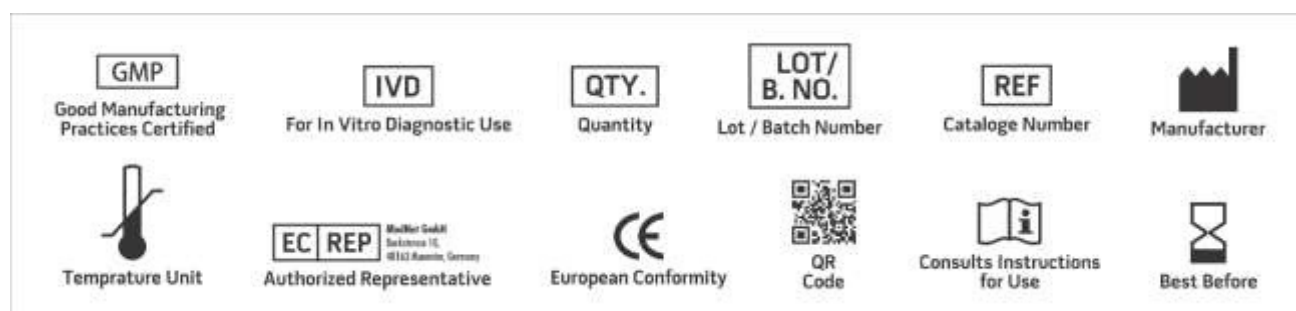
Product Deterioration: Do not use if they show evidence of microbial contamination, discoloration, drying or any other signs of deterioration.

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. Microbiology of food and animal feeding stuffs - Horizontal method for detection of potentially enteropathogenic *Vibrio* spp.- Part 1: International Organization for Standardization (ISO), 21872-1:2017.



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

*For Lab Use Only

