Saline Meat Yeast Agar

M1777

Saline Meat Yeast Agar is recommended as an identification media for *Vibrio parahaemolyticus* from food products or animal feeding products.

Composition**

Ingredients	Gms / Litre
Peptone	10.000
Meat extract	2.000
Yeast Extract	6.000
Sodium chloride	30.000
Cysteine hydrochloride	0.300
Glucose	2.000
Agar	8.000
pH after sterilzation (at 25°C)	7.50

**Formula adjusted, standardized to suit performance parameters

Directions

Suspend 58.30 grams in 1000 ml distilled water. Heat to boiling to dissolve the medium completely. Mix well and dispense in quantities of 4ml into test tubes (9mm x 180mm). Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes.

Note: Just before use, heat the test tubes on a boiling water-bath or in flowing steam for 10 min, and then cool rapidly to about 45º C.

Principle And Interpretation

Vibrio parahaemolyticus 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.

Saline Meat Yeast Agar is in accordance with ISO 8914: 1990 (1) recommended for detection of *Vibrio parahaemolyticus* present in food samples.

Peptone, Meat extract and yeast extract provide nitrogenous compounds, trace elements and vitamin B complex required for growth of *Vibrio* . High concentration of sodium chloride and alkaline pH of the medium provides condition that facilitates easy recovery of *V. parahemolyticus* and restrict the growth of other contaminating bacteria. Glucose is the fermentable sugar. Cysteine hydrochloride help in maintaining reduced atmosphere in the medium.

Inoculate a well defined isolated colony from Saline Nutrient Agar (M1776) to molten regenerated and cooled (45ºC) Saline Meat Yeast Agar (M1777) throughout its depth without introducing air bubbles. Immediately immerse the tubes in cold water to solidify the medium. Incubate at 35-37ºC for 24hrs and examine the growth. *Vibrio parahemolyticus* exhibits both aerobic and anaerobic growth with no gas production.

Quality Control

Appearance
Cream to yellow homogeneous free flowing powder

Colour and Clarity of prepared medium
Light yellow coloured clear to slightly opalescent gel forms in the tubes

Reaction
Reaction of 5.83% w/v aqueous solution after sterilization at 25°C. pH : 7.50

pH
7.50

Cultural Response

Cultural characteristics observed after an incubation at 35-37°C for 24 hours.

Cultural Response

Organism	Inoculum (CFU)	Growth
Cultural Response		
Vibrio parahaemolyticus ATCC 17802	50-100	good-luxuriant

Storage and Shelf Life

Store below 30°C in tightly closed container and the prepared medium at 2 - 8°C. Use before expiry date on the label.

Reference

1.International Organization for Standardization (ISO), 8914:1990.

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