



Saline Nutrient Agar

M1776

Saline Nutrient Agar is used for the cultivation of *Vibrio parahaemolyticus* from food products or animal feeding products.

Composition**

Ingredients	Gms / Litre
Peptone	5.000
Meat extract	3.000
Sodium chloride	30.000
Agar	15.000
pH after sterilization (at 25°C)	8.50±0.2

**Formula adjusted, standardized to suit performance parameters

Directions

Suspend 53.0 grams in 1000 ml distilled water. Heat if necessary to dissolve the medium completely. Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes. Mix well and pour in sterile Petri plates.

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 Nutrient Agar is recommended by ISO 8914:1990 (1) for isolating and enumerating *Vibrio parahaemolyticus* from food and animal feed.

Peptone and meat extract provide nitrogen compounds, growth factors and vitamins for the growth of *Vibrio parahaemolyticus*. High sodium chloride content and alkaline pH of the medium provides conditions that facilitate easy growth of *Vibrio parahaemolyticus*, while restricting the growth of most gram-negative microorganisms.

For isolation and confirmation of *Vibrio parahaemolyticus*, five typical colonies from Thiosulfate Citrate Bile Sucrose Agar (TCBS) or Triphenyltetrazolium Chloride Soya Tryptone Agar (TSAT) are subculture onto Saline Nutrient Agar followed by biochemical confirmation.

Quality Control

Appearance

Cream to yellow homogeneous free flowing powder

Gelling

Firm, comparable with 1.5% Agar gel

Colour and Clarity of prepared medium

Light yellow coloured clear to slightly opalescent gel forms in Petri plates

Reaction

Reaction of 5.3% w/v aqueous solution after sterilization at 25°C. pH : 8.5 ±0.2

pH

8.30 - 8.70

Cultural Response

Cultural characteristics observed after an incubation at 35-37°C for 18- 24 hours.

Cultural Response

Organism	Inoculum (CFU)	Growth	Recovery
----------	-------------------	--------	----------

Cultural Response

<i>Vibrio parahaemolyticus</i> ATCC 17802	50-100	good-luxuriant	$\geq 70\%$
<i>Vibrio cholerae</i> ATCC 15748	50-100	good-luxuriant	$\geq 70\%$
<i>Escherichia coli</i> ATCC 25922	50-100	good-luxuriant	$\geq 70\%$
<i>Enterobacter aerogenes</i> ATCC 13048	50-100	good-luxuriant	$\geq 70\%$

Storage and Shelf Life

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

Reference

1. Indian Standard, Microbiology- General Guidance for the Detection of *Vibrio parahaemolyticus*. ISO 8914:1990.

Revision : 02 / 2015

Disclaimer :

User must ensure suitability of the product(s) in their application prior to use. Products conform solely to the information contained in this and other related HiMedia™ publications. The information contained in this publication is based on our research and development work and is to the best of our knowledge true and accurate. HiMedia™ Laboratories Pvt Ltd reserves the right to make changes to specifications and information related to the products at any time. Products are not intended for human or animal or therapeutic use but for laboratory, diagnostic, research or further manufacturing use only, unless otherwise specified. Statements contained herein should not be considered as a warranty of any kind, expressed or implied, and no liability is accepted for infringement of any patents.