Saline Tryptone / Tryptophan Medium

M1779

Saline Tryptone/ Tryptophane Medium is recommended for identification of *Vibrio* species especially *Vibrio parahaemolyticus* on the basis of indole production.

Composition**

Ingredients	Gms / Litre
Tryptone	10.000
DL-tryptophane	1.000
Sodium chloride	30.000
Final pH (after sterilization) at 25°C	7.50

**Formula adjusted, standardized to suit performance parameters

Directions

Suspend 41 grams in 1000 ml distilled water. Heat, if necessary to dissolve the medium completely. Mix well and dispense in quantities of 5ml into test tubes. Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes.

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 Tryptone/ Tryptophane Medium is in accordance with ISO 8914:1990 (1) recommended for detection of *Vibrio parahaemolyticus* on the basis of indole production.

Tryptone provide nitrogenous compounds, sulphur, trace elements and vitamin B complex etc. 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 bacteria. *Vibrio parahemolyticus* break down tryptophane into indole and alpha-aminopropionic acid. The presence of indole in the medium can be detected by Kovac's reagent (R008).

Inoculate Saline Tryptone/ Tryptophan Medium with the suspected colony and incubate at 35-37ºC for 24hrs. After incubation add 1ml of Kovac's reagent (R008). The formation of red ring indicates a positive reaction, while yellow-brown ring indicates a negative reaction.

Quality Control

Appearance
Cream to yellow homogeneous free flowing powder

Colour and Clarity of prepared medium
Light yellow coloured clear solution

Reaction
Reaction of 4.1% w/v aqueous solution at 25°C. pH : 7.50

pH
7.50

Cultural Response
M1779: Cultural characteristics observed after an incubation at 35-37°C for 18-24 hours.

Organism	Inoculum (CFU)	Growth	Indole test
Cultural Response			
Vibrio parahaemolyticus ATCC 17802	50-100	luxuriant	positive reaction, red ring at the interface of the medium on addition of

Kovac's reagent
(R008)

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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