



## Folic Acid Inoculum Medium

M541

### Intended Use:

Recommended for preparation of inoculum of *Enterococcus hirae* ATCC 8043.

### Composition\*\*

Ingredients	Gms / Litre
Peptonized SM powder#	15.000
Yeast extract	5.000
Dextrose (Glucose)	10.000
Potassium dihydrogen phosphate	2.000
Tomato juice (100 ml)	5.000
Polysorbate 80 (Tween 80)	1.000
Final pH ( at 25°C)	6.8±0.2

\*\*Formula adjusted, standardized to suit performance parameters

# Equivalent to Peptonized milk

### Directions

Suspend 38 grams in 1000 ml purified / distilled water. Heat if necessary to dissolve the medium completely. Distribute in tubes. Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes.

### Principle And Interpretation

An important part of any assay is the maintenance and inoculum preparation of the test organism. Folic Acid Inoculum Medium is used for the preparation of inoculum to be used in the assay of the vitamins. Folic Acid Inoculum Medium is formulated as described by Kavanagh (1) and recommended by AOAC (2) for inoculum preparation of *Enterococcus hirae* ATCC 8043, the test organism for Folic Acid Assay Medium (1).

Yeast extract and Peptonized SM powder supply mainly the nitrogenous nutrients, vitamins and minerals essential for the growth of the test organisms. Dextrose is the energy source in the medium while tomato juice provides the growth factors. Polysorbate 80 maintains the surface tension of the medium to the optimal level while phosphate serves as buffering to the medium.

Extreme care should be taken to avoid contamination of media or glassware used for the assay. Detergent free clean glassware should be used. Even small amount of contamination by foreign material can lead to erroneous results.

### Type of specimen

Isolated Microorganism

### Specimen Collection and Handling:

Inoculate 10 ml of Folic Acid Inoculum Medium with an 18-24 hours old culture from Folic Acid Culture Agar (M134). Incubate at 35-37°C for 18-24 hours. Centrifuge the growth and resuspend the sediment in 10 ml of 0.85 % sterile saline, after decanting the supernatant. Repeat washing with saline, two more times. Dilute 1 ml of the washed cell suspension with 99 ml of 0.85% sterile saline (1:100). Adjust the inoculum concentration as per requirement or standard reference (2).

### Warning and Precautions :

Read the label before opening the container. Wear protective gloves/protective clothing/eye protection/ face protection. Follow good microbiological lab practices while handling specimens and culture. Standard precautions as per established guidelines should be followed while handling specimens. Safety guidelines may be referred in individual safety data sheets.

### Limitations :

1. Extreme care should be taken to avoid contamination of media or glassware used for the assay.
2. Detergent free clean glassware should be used.

## Performance and Evaluation

Performance of the medium is expected when used as per the direction on the label within the expiry period when stored at recommended temperature.

## Quality Control

### Appearance

Cream to yellow homogeneous free flowing powder

### Colour and Clarity of prepared medium

Medium amber coloured, clear to slightly opalescent solution in tubes

### Reaction

Reaction of 3.8% w/v aqueous solution at 25°C. pH : 6.8±0.2

### pH

6.60-7.00

### Cultural Response

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

Organism	Inoculum (CFU)	Growth
<i>#Lactobacillus rhamnosus</i> 7469!(00101*)	50-100	luxuriant
<i>Lactobacillus leichmannii</i> ATCC 7830	50-100	luxuriant
<i>Lactobacillus plantarum</i> ATCC 8014	50-100	luxuriant
<i>Enterococcus hirae</i> ATCC 8043 (00089*)	50-100	luxuriant

## Reference

1. Kavanagh F., 1963, Analytical Microbiology, Academic Press, New York.
2. Williams. (Ed.), 2005, Official Methods of Analysis of the Association of Official Analytical Chemists, 19th ed., AOAC, Washington, D.C.

Revision : 1 / 2011

### 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.