

TM 2088 – FOLIC ACID CULTURE AGAR

INTENDED USE

For the maintenance of Enterococcus hirae ATCC 8043.

PRODUCT SUMMARY AND EXPLANATION

An important part of any assay is the maintenance and inoculum preparation of the test organism. Folic Acid Culture Agar is used to maintain stock cultures of a wide variety of test cultures like *Lactobacillus leichmannii* ATCC 7830, *Enterococcus hirae* ATCC 8043, *Lactobacillus plantarum (casei)* ATCC 8014 and *Lactobacillus rhamnosus* ATCC 7469 used in microbiological assay of vitamins. Folic Acid Culture Agar is formulated as described by Kavanagh and recommended by AOAC for maintenance of *Enterococcus hirae* ATCC 8043, the test organism for Folic Acid Assay Medium.

COMPOSITION

Ingredients	Gms / Ltr	
Peptonized milk	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	
Agar	10.000	

PRINCIPLE

The medium consists of Yeast extract and peptonized milk which 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.

INSTRUCTION FOR USE

- Dissolve 48.0 grams in 1000 ml distilled water.
- Heat to boiling to dissolve the medium completely.
- Distribute in tubes and Sterilize by autoclaving at 15 psi pressure (121°C) for 15 minutes.
- Cool the tubes to 45-50°C rapidly in an upright position.

QUALITY CONTROL SPECIFICATIONS

Appearance of Powder : Cream to yellow homogeneous free flowing powder.

Appearance of prepared medium : Medium amber coloured, clear to slightly opalescent gel forms in tubes as

butts.

pH (at 25°C) : 6.8 ± 0.2

INTERPRETATION

Cultural characteristics observed after incubation.













Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Incubation Temperature	Incubation Period
Lactobacillus casei	7469	50-100	Luxuriant	35-37°C	18-24 Hours
Lactobacillus leichmannii	7830	10-100	Luxuriant	35-37°C	18-24 Hours
Lactobacillus plantarum	8014	50-100	Luxuriant	35-37°C	18-24 Hours
Enterococcus hirae	8043	50-100	Luxuriant	35-37°C	18-24 Hours

PACKAGING:

In pack size of 100 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.

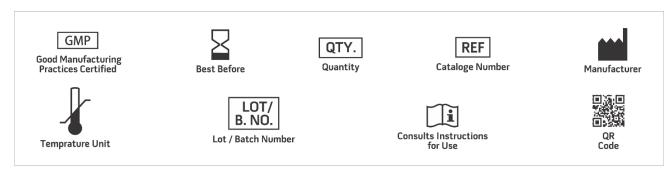
Product Deterioration: Do not use if they show evidence of microbial contamination, discoloration, drying or any other signs of deterioration.

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

















NOTE: Please consult the Material Safety Data Sheet for information regarding hazards and safe handling Practices. *For Lab Use Only **Revision: 08 Nov., 2019**







