

# TM 144 – LACTOBACILLI AGAR (AOAC)

#### **INTENDED USE**

For cultivation and maintenance of stock cultures used in microbiological assays of vitamin and amino acids.

### PRODUCT SUMMARY AND EXPLANATION

Lactobacilli Agar, AOAC was formulated by Loy and recommended by AOAC for carrying stock cultures used for Microbiological assay of Vitamin B. Lactobacilli Agar, AOAC is used for the cultivation and maintenance of stock cultures of *Lactobacillus casei* ATCC 7469, *Lactobacillus fermentum* ATCC 9338, *Lactobacillus leichmannii* ATCC 4797, and *Lactobacillus viridescens* ATCC 12706 by stab inoculation of sterile tubed medium followed by incubation for 18-24 hours at a constant temperature between 30-40°C. The cultures are then stored at 2-8°C.

### **COMPOSITION**

Ingredients	Gms / Ltr	
Peptonized milk	15.000	
Yeast extract	5.000	
Dextrose	10.000	
Tomato juice (100 ml)	5.000	
Monopotassium phosphate	2.000	
Polysorbate 80	1.000	
Agar	10.000	

# **PRINCIPLE**

This medium consists of Peptonized milk and yeast extract which provide essential growth nutrients. Dextrose is the energy source. Phosphate provides buffering system while tomato juice helps in lowering the pH. Polysorbate 80 serves as an emulsifier.

# **INSTRUCTION FOR USE**

- Dissolve 48.0 grams in 1000 ml purified/distilled water.
- Heat to boiling to dissolve the medium completely.
- Distribute into tubes in 10 ml amounts and sterilize by autoclaving at 15 psi pressure (121°C) for 15 minutes.
- Cool the tubed agar medium 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
Enterococcus hirae	8043	50-100	Luxuriant	35-37°C	18-48 Hours
Lactobacillus casei	7469	50-100	Luxuriant	35-37°C	18-48 Hours
Lactobacillus leichmannii	7830	50-100	Luxuriant	35-37°C	18-48 Hours
Lactobacillus plantarum	8014	50-100	Luxuriant	35-37°C	18-48 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 2-8°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.

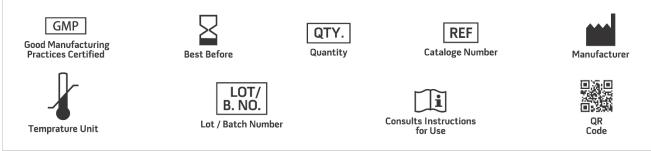
Product Deterioration: Do not use if they show evidence of microbial contamination, discoloration, drying or any other signs of deterioration.

# **DISPOSAL**

After use, prepared plates, specimen/sample containers and other contaminated materials must be sterilized before discarding.

# **REFERENCES**

- 1. Loy, 1958, J. AOAC, 4:61.
- 2. 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









