

TM 1131 – ACETOBACTER AGAR W/LIVER EXTRACT

INTENDED USE

For maintenance of dextrose positive *Acetobacter* species.

PRODUCT SUMMARY AND EXPLANATION

Acetobacter species are aerobic, gram-negative organisms. Acetic acid bacteria are found in fruits with high carbohydrate concentration, which is selective for yeasts, that produce ethanol. This ethanol forms the substrate for acetic acid bacteria and may oxidize ethanol to acetic acid. Various synthetic and maintenance media for *Acetobacter* cultures have been cited. A typical maintenance medium is Acetobacter Agar. Acetobacter Agar is formulated as per Manual of Microbiological Methods and used for the maintenance of *Acetobacter* species utilizing glucose or mannitol. Acetobacter Agar w/ liver extract is a modification of Acetobacter Agar.

COMPOSITION

Ingredients	Gms / Ltr
Tryptone	5.000
Liver extract	2.000
Dextrose (Glucose)	20.000
Calcium carbonate	10.000
Agar	20.000

PRINCIPLE

Tryptone, liver extract in the medium provides nitrogen, vitamins and minerals necessary to support bacterial growth. Glucose acts as energy source. Calcium carbonate acts as a buffer.

INSTRUCTION FOR USE

- Dissolve 57 grams in 1000 ml purified / distilled water.
 - Heat just to boiling. Dispense in test tubes, taking care to distribute calcium carbonate evenly.
 - Sterilize by autoclaving at 15 psi pressure (121°C) for 15 minutes.
 - Shake the tubes and place them to cool in a slanted position so as to keep the calcium carbonate in suspension.
- Note: Due to presence of calcium carbonate, the prepared medium forms opalescent solution with white precipitate.

QUALITY CONTROL SPECIFICATIONS

Appearance of Powder	: Cream to yellow homogeneous free flowing powder.
Appearance of prepared medium	: Light amber coloured opalescent gel with heavy white precipitate, forms in tubes as slants.
pH (at 25°C)	: 7.4±0.2

INTERPRETATION

Cultural characteristics observed after incubation.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Incubation Temperature	Incubation Period



<i>Acetobacter aceti</i>	15973	50-100	Good	35-37°C	24-48 Hours
<i>Acetobacter liquifaciens</i>	14835	50-100	Good	35-37°C	24-48 Hours

PACKAGING:

In pack size of 500 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. Asai, 1968, Univ. of Tokyo Press, Tokyo, Japan and Univ. Park Press, Baltimore, MD.
2. Catalogue of Bacteria and Bacteriophages, 1992, 18th Ed., American Type Culture Collection, Rockville, MD.
3. Salfinger Y., and Tortorello M.L., 2015, Compendium of Methods for the Microbiological Examination of Foods, 5th Ed., American Public Health Association, Washington, D.C.

 GMP Good Manufacturing Practices Certified	 Best Before	 QTY. Quantity	 REF Catalogue Number	 Manufacturer
 Temperature Unit	 LOT/ B. NO. Lot / Batch Number	 Consults Instructions for Use	 QR Code	

NOTE: Please consult the Material Safety Data Sheet for information regarding hazards and safe handling Practices.

***For Lab Use Only**
Revision: 08 Nov., 2019