

TM 1130 – ACETOBACTER AGAR (MANNITOL)

INTENDED USE

For maintenance of mannitol positive *Acetobacter* species.

PRODUCT SUMMARY AND EXPLANATION

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 mannitol.

COMPOSITION

| Ingredients | Gms / Ltr |
|---------------|-----------|
| Peptone | 3.000 |
| Yeast extract | 5.000 |
| Mannitol | 25.000 |
| Agar | 15.000 |

PRINCIPLE

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

INSTRUCTION FOR USE

- Dissolve 48.0 grams in 1000 ml purified / distilled water.
- Heat to boiling to dissolve the medium completely.
- Dispense in test tubes and sterilize by autoclaving at 15 psi pressure (121°C) for 15 minutes.
- Cool to 45-50°C and place them in a slanted position.

QUALITY CONTROL SPECIFICATIONS

| | |
|--------------------------------------|--|
| Appearance of Powder | : Cream to yellow homogeneous free flowing powder. |
| Appearance of prepared medium | : Yellow coloured clear to slightly opalescent gel 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 Hansenii</i> | 35959 | 50-100 | Good-luxuriant | 35-37°C | 24-48 Hours |



| | | | | | |
|---------------------------------|------|--------|----------------|---------|-------------|
| <i>Acetobacter pasteurianus</i> | 6033 | 50-100 | Good-luxuriant | 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. Manual of Microbiological Methods, 1957, Society of American Bacteriologists, McGraw-Hill Book Company, New York.
3. Catalogue of Bacteria and Bacteriophages, 1992, 18th Ed., American Type Culture Collection, Rockville, MD.
4. Salfinger Y., and Tortorello M.L. Fifth (Ed.), 2015, Compendium of Methods for the Microbiological Examination of Foods, 5th Ed., American Public Health Association, Washington, D.C.

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|  Good Manufacturing Practices Certified |  Best Before |  Quantity |  Catalogue Number |  Manufacturer |
|  Temperature Unit |  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**
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