

TM 145 – LACTOBACILLI BROTH (AOAC)

INTENDED USE

For preparation of inocula of stock cultures used in microbiological assays of vitamins of group B.

PRODUCT SUMMARY AND EXPLANATION

Lactobacilli Broth, AOAC was formulated by Loy and recommended by AOAC for preparing inocula of test bacteria used for Microbiological assay of Vitamin B. Stock cultures of *Lactobacillus leichmanni* ATCC 7830, *Lactobacillus plantarum* ATCC 8014, *Lactobacillus casei* ATCC 7469, *Enterococcus hirae* ATCC 8043 and other such B vitamin requiring strains are prepared by stab inoculation of sterile Lactobacillus Agar, AOAC and incubated for 18-24 hours at a constant temperature between 30-40°C. Lactobacilli Broth, AOAC is used for cultivation and preparation of inocula of the above mentioned stock cultures. Inoculum is prepared by inoculating these cultures in Lactobacillus Broth, AOAC and incubating at 35-37°C.

COMPOSITION

| Ingredients | Gms / Ltr |
|--------------------------------|-----------|
| Peptonized milk | 15.000 |
| Yeast extract | 5.000 |
| Dextrose (Glucose) | 10.000 |
| Tomato juice (100 ml) | 5.000 |
| Potassium dihydrogen phosphate | 2.000 |
| Polysorbate 80 (Tween 80) | 1.000 |

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 supplies fatty acids. Before using a culture in any assay, at least 2 successive transfers during a 1-2 week period are essential. Any culture older than one week should not be used.

INSTRUCTION FOR USE

- Dissolve 38.0 grams in 1000 ml purified/distilled water.
- Heat if necessary 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.

QUALITY CONTROL SPECIFICATIONS

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|-------------------------------|--|
| Appearance of Powder | : Cream to yellow homogeneous free flowing powder. |
| Appearance of prepared medium | : Medium amber coloured clear solution in tubes. |
| pH (at 25°C) | : 6.8 ± 0.2 |

INTERPRETATION

Cultural characteristics observed after incubation.

| Microorganism | ATCC | Inoculum (CFU/ml) | Growth | Incubation Temperature | Incubation Period |
|---------------|------|-------------------|--------|------------------------|-------------------|
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|----------------------------------|------|--------|-----------|---------|-------------|
| <i>Enterococcus hirae</i> | 8043 | 50-100 | Luxuriant | 35-37°C | 18-48 Hours |
| <i>Lactobacillus casei</i> | 7469 | 50-100 | Luxuriant | 35-37°C | 18-48 Hours |
| <i>Lactobacillus leichmannii</i> | 7830 | 50-100 | Luxuriant | 35-37°C | 18-48 Hours |
| <i>Lactobacillus plantarum</i> | 8014 | 50-100 | Luxuriant | 35-37°C | 18-48 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 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. Atlas R. M., 2004, Handbook of Microbiological Media, 3rd Edition, CRC Press
2. Isenberg, H.D. Clinical Microbiology Procedures Handbook 2nd Edition.
3. 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.
4. Loy, 1958, J. AOAC, 4:61.
5. Williams, (Ed.), 2005, Official Methods of Analysis of the Association of Official Analytical Chemists, 19th Ed., AOAC, Washington, D.C.

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|  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**
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