

TMV 146 – LACTOBACILLUS MRS AGAR (MRS AGAR) VEG.)

INTENDED USE

For isolation and cultivation of *Lactobacillus* species.

PRODUCT SUMMARY AND EXPLANATION

These media are prepared by completely replacing animal based peptones with vegetable peptones, which makes the medium free of BSE/TSE risks. Lactobacillus MRS Veg media are the modification of Lactobacillus MRS Agar / Broth which are based on the formulation of deMan, Rogosa and Sharpe with slight modification. These media like the conventional media supports luxuriant growth of all Lactobacilli from oral cavity, dairy products, foods, faeces and other sources.

COMPOSITION

Ingredients	Gms / Ltr
Veg peptone No. 3	10.000
Veg extract	10.000
Yeast extract	5.000
Dextrose	20.000
Polysorbate 80	1.000
Ammonium citrate	2.000
Sodium acetate	5.000
Magnesium sulphate	0.100
Manganese sulphate	0.050
Dipotassium phosphate	2.000
Agar	12.000

PRINCIPLE

This medium consists of Veg Peptone No. 3 and Veg extract which supply nitrogenous and carbonaceous compounds. Yeast extract provides vitamin B complex and dextrose is the fermentable carbohydrate and energy source. Polysorbate 80 supplies fatty acids required for the metabolism of Lactobacilli. Sodium acetate and ammonium citrate inhibit Streptococci, moulds and many other microorganisms. Magnesium sulphate, Manganese sulphate provide essential ions for multiplication of Lactobacilli. Phosphate provide good buffering action in the media.

INSTRUCTION FOR USE

- Dissolve 67.15 grams in 1000 ml purified/distilled water.
- Heat to boiling to dissolve the medium completely.
- Distribute in tubes, bottles or flasks as desired and Sterilize by autoclaving at 15 psi pressure (121°C) for 15 minutes.

QUALITY CONTROL SPECIFICATIONS



Appearance of Powder : Yellow coloured may have slightly greenish tinge, homogeneous, free flowing powder.

Appearance of prepared medium : Medium amber coloured, clear to slightly opalescent gel forms in petri plates.

pH (at 25°C) : 6.5 ± 0.2

INTERPRETATION

Cultural characteristics observed in presence of 5% Carbon dioxide (CO₂) after incubation.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Recovery	Incubation Temperature	Incubation Period
<i>Lactobacillus leichmannii</i>	7830	50-100	Luxuriant	≥70%	35-37°C	18-24 Hours
<i>Lactobacillus fermentum</i>	9338	50-100	Luxuriant	≥70%	35-37°C	18-24 Hours
<i>Lactobacillus plantarum</i>	8014	50-100	Luxuriant	≥70%	35-37°C	18-24 Hours

PACKAGING:

In pack size of 100 gm and 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. deMan J., Rogosa M. and Sharpe M., 1960, J. Appl. Bacteriol., 23:130.
2. Standard Methods for the Examination of Dairy Products. 17th Edition, 2004 Edited by H. Michael Wehr and Joseph H. Frank.
3. Frances Pouch Downes and Keith Ito (Eds.), 2001, Compendium of Methods For The Microbiological Examination of Foods, 4th ed., APHA, Washington, D.C.
4. Sabine and Vaselekos, 1965, Nature, 206:960.
5. MacFaddin J., 2000, Media for Isolation-Cultivation-Identification Maintenance of Medical Bacteria, 3rd edition, Williams and Wilkins, Baltimore.



GMP Good Manufacturing Practices Certified	IVD For In Vitro Diagnostic Use	QTY. Quantity	LOT/ B. NO. Lot / Batch Number	REF Catalogue Number	 Manufacturer
 Temperature Unit	EC REP MedNet GmbH Buckstrasse 10, 48163 Muenster, Germany Authorized Representative	 European Conformity	 QR Code	 Consults Instructions for Use	 Best Before

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

***For Lab Use Only**
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