

Rogosa Agar Modified With Arabinose

DM634

Intended use

For the isolation and enumeration of Lactobacilli.

Contents

See pack label.

Formulation*

Material:	Concentration in medium:
Peptone mixture	10.0 g/litre
Yeast extract	5.0 g/litre
Glucose	10.0 g/litre
Arabinose	5.0 g/litre
Sucrose	5.0 g/litre
Sodium acetate	3.0 g/litre
Tri-ammonium citrate	2.0 g/litre
Potassium di-hydrogen phosphate	2.0 g/litre
Magnesium sulphate	0.2 g/litre
Manganese sulphate	0.034 g/litre
Ferrous sulphate	0.03 g/litre
Tween 80	1.0 g/litre
Agar	19.0 g/litre
Final pH: 5.4 ± 0.2	

Storage and shelf life

All dehydrated culture media containers should be kept tightly closed and stored in a dry place at 10 to 25°C until the expiry date shown on the pack label.

Precautions

For *in vitro* diagnostic use only. Observe approved hazard precautions and aseptic techniques. To be used only by adequately trained and qualified laboratory personnel. Sterilise all biohazard waste before disposal. Refer to Product Safety Data sheet (available on request or via MAST® website).

Materials required but not provided

Standard microbiological supplies and equipment such as loops, MAST® selective supplements, swabs, applicator sticks, incinerators and incubators, etc., as well as serological and biochemical reagents and additives such as blood.

Procedure

1. Refer to pack label for quantities and volumes required. Prepare MAST® Rogosa Agar Modified with Arabinose (DM634D) by suspending the powder in distilled or deionised water. For sachet packs, dissolve the entire contents of the sachet in the volume shown on the label.
2. Add glacial acetic acid to a final concentration of 1.32ml/litre.

3. Bring to the boil until dissolved. DO NOT AUTOCLAVE.
4. Pour culture plates (15 to 20ml per plate) and allow to set.
5. Prepared culture plates may be used immediately or stored in plastic bags at 2 to 8°C for up to one week before use.
6. Inoculate plates by surface plating. Quantitative investigations can be made by inoculating additional plates with prepared dilutions of the specimen. Alternatively the medium can be inoculated using a pour plate technique.
7. Incubate under anaerobic or microaerobic conditions for up to 5 days at 30°C (or alternative temperatures according to the methodology followed).

Interpretation of results

After incubation record growth of organisms. Typical characteristics to note include colony size, morphology and pigmentation. Lactobacilli and other lactic acid bacteria are typically greyish-white and up to 2mm in diameter with varying morphology. From quantitative plates, count the number of colonies of each colonial type on plates containing between 15 and 150 colonies, and determine the number of lactobacilli/lactic acid bacteria per gram or ml of original sample.

Quality control

Check for signs of deterioration. Quality control must be performed with at least one organism to demonstrate expected performance. Do not use the product if the result with the control organism is incorrect. The list below illustrates a range of performance control strains which the end user can easily obtain.

Test Organisms	Result
<i>Lactobacillus acidophilus</i> ATCC® 314	Growth,
<i>Staphylococcus aureus</i> ATCC® 25923	No growth

Limitations of use

Do not allow the surface of the plates to dry as this will inhibit lactobacilli due to an increase in the acetate concentration on the agar surface.

References

Bibliography available on request.