

## Rogosa S L Agar

### Intended Use

Rogosa S L Agar is used as a selective medium for cultivation of oral, vaginal and faecal Lactobacilli.

### Summary

Rogosa S L Agar also known as RMW Agar, is a modification of the media formulated by Rogosa, Mitchell and Wiseman. This media is used for isolation, enumeration and identification of Lactobacilli from foodstuffs and clinical specimens. Accompanying bacterial flora is suppressed due to the low pH of the medium and also because of the high sodium acetate concentration.

### Principle

Tryptose and yeast extract provide nitrogenous compounds, sulphur, trace elements and vitamin B complex, essential for growth of Lactobacilli. Dextrose, arabinose and saccharose are the fermentable carbohydrates. Polysorbate 80 is the source of fatty acids. Ammonium citrate and Sodium acetate inhibit moulds, Streptococci and many other organisms. Monopotassium phosphate provides buffering capability. Magnesium sulphate, manganese sulphate and ferrous sulphate are sources of inorganic ions. Low pH of the medium and addition of acetic acid makes the medium selective for inhibiting other bacterial flora.

### Formula\*

Ingredients	g/L
Tryptose	10.0
Yeast Extract	5.0
Dextrose	10.0
Arabinose	5.0
Saccharose	5.0
Sodium acetate	15.0
Ammonium citrate	2.0
Monopotassium Phosphate	6.0
Magnesium Sulphate	0.57
Manganese Sulphate	0.12
Ferrous sulphate	0.03
Polysorbate 80	1.0
Agar	15.0
Final pH (at 25°C)	5.4 ± 0.2

\*Adjusted to suit performance parameters

### Storage and Stability

Store dehydrated medium below 30°C in tightly closed container and the prepared medium at 2°C-8°C. Avoid freezing and overheating. Use before expiry date on the label. Once opened keep powdered medium closed to avoid hydration.

### Type of Specimen

Clinical samples - Oral, Vaginal, Faecal; Food samples

### Specimen Collection and Handling

Ensure that all samples are properly labelled. Follow appropriate techniques for handling samples as per established guidelines. Some samples may require special handling, such as immediate refrigeration or protection from light, follow the standard procedure. The samples must be stored and tested within the permissible time duration. After use, contaminated materials must be sterilized by autoclaving before discarding.

### Directions

1. Suspend 74.72 g of the powder in 1000 mL distilled water.
2. Boil to dissolve the powder completely.
3. Add 1.32 mL glacial acetic acid. Mix thoroughly. Heat to 90°C-100°C for 2-3 minutes.
4. Cool to 45°C-50°C for direct inoculation.
5. DO NOT AUTOCLAVE.

### Quality Control

**Dehydrated Appearance:** Light yellow coloured, homogenous free flowing powder.

**Prepared Appearance:** Light yellow to amber coloured, slightly opalescent gel forms in petriplates.

**Cultural Response:** Cultural characteristics observed after an incubation of 40-48 hours at 30°C-35°C, in 5% CO<sub>2</sub> and 95% H<sub>2</sub>.

Organism (ATCC)	Growth
<i>Lactobacillus fermentum</i> (9338)	Good
<i>Lactobacillus casei</i> (9595)	Good
<i>Lactobacillus leichmanni</i> (4797)	Good
<i>Lactobacillus plantarum</i> (8014)	Good
<i>Staphylococcus aureus</i> (25923)	Good

### Performance and Evaluation

Performance of the product is dependent on following parameters as per product label claim:

1. Directions
2. Storage
3. Expiry

### Precautions / Limitations

1. High acetate concentration and acidic pH suppress many strains of other lactic acid bacteria.
2. All colonies should be checked by Gram staining and by catalase test before further identification.
3. The salt in the formulation makes the medium unsuitable for isolation of dairy Lactobacilli e.g. *L. lactis*, *L. bulgaricus* and *L. helveticus*.

### Warranty

This product is designed to perform as described on the label and package insert. The manufacturer disclaims any implied warranty of use and sale for any other purpose.

### Reference

1. Downes F. P. and Ito K., (Eds.), Compendium of Methods for the Microbiological Examination of Foods, 4<sup>th</sup> Ed., American Public Health Association, Washington, D.C.
2. MacFaddin J. F., 1985, Media for Isolation-Cultivation- Identification- Maintenance of Medical Bacteria, Vol. I, Williams and Wilkins, Baltimore. Md.
3. Rogosa M., Mitchell J. A. and Wiseman R. F., 1951, J. Bacteriol., 62, 132-133.
4. Rogosa M., Mitchell J. A. and Wiseman R. F., 1951, J. Dental Res. 30:682.
5. Sharpe M. L. (Ed.), 1960, Lab-Practice, 9(4): 223.
6. Data on file: Microxpress®, A Division of Tulip Diagnostics (P) Ltd.

### Product Presentation:

Cat No.	Product description	Pack Size
201180120500	Dehydrated Culture Media	500 g

### Disclaimer

Information provided is based on our inhouse technical data on file, it is recommended that user should validate at his end for suitable use of the product.

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