PRODUCT SPECIFICATION SHEET

Rogosa SL Agar (DM228)

Intended Use
Rogosa SL Agar (DM228) is recommended for selective cultivation of oral and faecal *Lactobacilli*.

Product Summary and Explanation
Rogosa SL Agar also known as RMW Agar, is a modification of the media formulated by Rogosa, Mitchell and Wiseman.[1,2] This media is used for isolation, enumeration and identification of of lactobacilli in oral bacteriology, feces, vaginal specimens and foodstuffs.[3,4] The low pH and high sodium acetate concentrations effectively suppress other accompanying bacterial flora allowing lactobacilli to flourish.

Principles of the Procedure
Rogosa SL Agar contains tryptose and yeast extract which provides 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. Sodium acetate and ammonium citrate inhibit streptococci, moulds and other oral microbial flora and restrict swarming. 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 / Liter

Ingredients	Gms / Liter
Tryptose	10.00
Yeast extract	5.00
Dextrose	10.00
Arabinose	5.00
Saccharose	5.00
Sodium acetate	15.00
Ammonium citrate	2.00
Monopotassium phosphate	6.00
Magnesium sulphate	0.57
Manganese sulphate	0.12
Ferrous sulphate	0.03
Polysorbate 80	1.00
Agar	15.00
Final pH: 5.4 ± 0.2 at 25°C	
Formula may be adjusted and/or supplemented as required to meet performance specifications	

Precautions
1. For Laboratory Use only.
2. IRRITANT. Irritating to eyes, respiratory system, and skin.

Directions
1. Suspend 74.72 grams of the medium in one liter of distilled water.
2. Heat to boiling, to dissolve the medium completely.
3. Add 1.32 ml glacial acetic acid.
4. Mix thoroughly, distribute into culture tubes or flasks.
5. Heat to 90 - 100°C for 2-3 minutes. Cool to 45°C for direct inoculation.
6. DO NOT AUTOCLAVE.

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Quality Control Specifications

Dehydrated Appearance	Cream to yellow homogeneous soft lumps which can be easily broken down to powder form.
Prepared Medium	Light yellow coloured opalescent gel forms in Petri plates
Reaction of 7.5% solution with 0.132% acetic acid	pH 5.4 ± 0.2 at 25°C
Gel Strength	Firm, comparable with 1.5% Agar gel

Expected Cultural Response: Cultural characteristics observed in presence of 5% Carbon dioxide (CO_2) and 95% H_2 after an incubation at 35-37°C for 40-48 hours.

Sr. No.	Organisms	Results to be achieved		
		Inoculum (CFU)	Growth	Recovery
1.	*Lactobacillus casei ATCC 9595*	50-100	good-luxuriant	>=50%
2.	*Lactobacillus fermentum ATCC 9338*	50-100	good-luxuriant	>=50%
3.	*Lactobacillus leichmanni ATCC 4797*	50-100	good-luxuriant	>=50%
4.	*Lactobacillus plantarum ATCC 8014*	50-100	good-luxuriant	>=50%
5.	*Staphylococcus aureus ATCC 25923*	>=10^3	inhibited	0%

The organisms listed are the minimum that should be used for quality control testing.

Test Procedure

Refer to appropriate references for standard test procedures.

Results

Refer to appropriate references and standard test procedures for interpretation of results.

Storage

Store the sealed bottle containing the dehydrated medium at 10 - 30°C. Once opened and recapped, place container in a low humidity environment at the same storage temperature. Protect from moisture and light.

Expiration

Refer to the expiration date stamped on the container. The dehydrated medium should be discarded if not free flowing, or if the appearance has changed from the original color. Expiry applies to medium in its intact container when stored as directed.

Limitations of the Procedure

1. It is recommended that the plates should be incubated at 30°C for 5 days or at 37°C for 3 days in an atmosphere of 95% hydrogen and 5% carbon dioxide.
2. If this is not possible, overlay the inoculated plates with a second layer of the agar before incubation.
3. High acetate concentration and acidic pH suppress many strains of other lactic acid bacteria.
4. All colonies should be checked by gram staining and by catalase test before further identification.
5. The salt in the formulation makes the media unsuitable for isolation of dairy lactobacilli; e.g., *L. lactis, L. bulgaricus* and *L. helveticus*.
6. Consult appropriate texts for detailed information and recommended procedures.

Packaging

Product Name : Rogosa SL Agar

Product Code : DM228

Available Pack sizes : 500gm

References

1. Rogosa M., Mitchell J. A. and Wiseman R. F, 1951, J. Bacteriol., 62, 132-133.
2. Rogosa M., Mitchell J. A. and Wiseman R. F., 1951, J. Dental Res. 30:682.

3. Downes F. P. and Ito K., (Eds.), Compendium of Methods for the Microbiological Examination of Foods, 4th Ed., American Public Health Association, Washington, D.C.
4. MacFaddin J. F., 1985, Media for Isolation-Cultivation-Identification- Maintenance of Medical Bacteria, Vol. I, Williams and Wilkins, Baltimore. Md.

Further Information

For further information please contact your local MICROMASTER Representative.

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	Checked By	Approved By
01.01.2018	01.01.2018	01.01.2018
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