

# TM 274 – ROGOSA SL AGAR

#### **INTENDED USE**

For selective cultivation of oral, vaginal 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. 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.

#### **COMPOSITION**

Ingredients	Gms / Ltr		
Tryptose	10.000		
Yeast extract	5.000		
Dextrose (Glucose)	10.000		
Arabinose	5.000		
Saccharose (Sucrose)	5.000		
Sodium acetate	15.000		
Ammonium citrate	2.000		
Potassium dihydrogen phosphate	6.000		
Magnesium sulphate	0.570		
Manganese sulphate	0.120		
Ferrous sulphate	0.030		
Polysorbate 80 (Tween 80)	1.000		
Agar	15.000		

#### **PRINCIPLE**

The medium consists of Tryptose and yeast extract which 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 Lactobacilli inhibiting other bacterial flora.

## **INSTRUCTION FOR USE**

- Dissolve 74.72 grams in 1000 ml purified/distilled water.
- Heat to boiling to dissolve the medium completely.
- Add 1.32 ml glacial acetic acid. Mix thoroughly, distribute into culture tubes or flasks.













Heat to 90 - 100°C for 2-3 minutes.

Cool to 45-50°C for direct inoculation. DO NOT AUTOCLAVE.

#### **QUALITY CONTROL SPECIFICATIONS**

**Appearance of Powder** : Cream to yellow homogeneous soft lumps which can be easily broken down to

powder form.

Appearance of prepared medium : Light yellow coloured opalescent gel forms in Petri plates.

pH (at 25°C)  $: 5.4 \pm 0.2$ 

#### **INTERPRETATION**

Cultural characteristics observed in presence of 5% Carbon dioxide (CO<sub>2</sub>) and 95% H<sub>2</sub> after incubation.

Microorganism	АТСС	Inoculum (CFU/ml)	Growth	Recovery	Incubation Temperature	Incubation Period
Lactobacillus casei	9595	50-100	Good - luxuriant	>=50%	35-37°C	40-48 Hours
Lactobacillus fermentum	9338	50-100	Good - luxuriant	>=50%	35-37°C	40-48 Hours
Lactobacillus leichmanni	4797	50-100	Good - luxuriant	>=50%	35-37°C	40-48 Hours
Lactobacillus plantarum	8014	50-100	Good - luxuriant	>=50%	35-37°C	40-48 Hours
Staphylococcus aureus subsp. aureus	25923	>=104	Inhibited	0%	35-37°C	40-48 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.







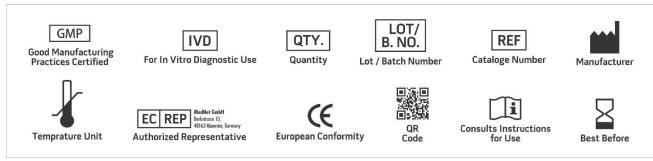






#### **REFERENCES**

- 1. MacFaddin J. F., 1985, Media for Isolation-Cultivation-Identification- Maintenance of Medical Bacteria, Vol. I, Williams and Wilkins, Baltimore. Md.
- 2. Rogosa M., Mitchell J. A. and Wiseman R. F, 1951, J. Bacteriol., 62, 132-133.
- 3. Rogosa M., Mitchell J. A. and Wiseman R. F., 1951, J. Dental Res. 30:682.
- 4. Salfinger Y., and Tortorello M.L. Fifth (Ed.), 2015, Compendium of Methods for the Microbiological Examination of Foods, 5th Ed., American Public Health Association, Washington, D.C.
- 5. Sharpe M. L. (Ed.), 1960, Lab-Practice, 9(4): 223.



NOTE: Please consult the Material Safety Data Sheet for information regarding hazards and safe handling Practices. \*For Lab Use Only

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