

## ROGOSA SL AGAR

**CAT N°: 1096**

Selective medium for the cultivation of lactobacilli in medical and food microbiology

### FORMULA IN g/l

Sodium Acetate	15.00	Ammonium Citrate	2.00
Tryptone	10.00	Polysorbate 80	1.00
Dextrose	10.00	Magnesium Sulfate	0.57
Monopotassium Phosphate	6.00	Manganese Sulfate	0.12
Yeast Extract	5.00	Ferrous Sulfate	0.03
Sucrose	5.00	Bacteriological Agar	15.00
Arabinose	5.00		

**Final pH 5.4 ± 0.2 at 25°C**

### PREPARATION

Suspend 75 grams of the medium in one liter of distilled water. Mix well and dissolve by heating with frequent agitation. Boil for one minute until complete dissolution. Add 1.32 ml of Acetic Acid Glacial and mix well. Heat again at 90 - 100°C for two minutes. DO NOT AUTOCLAVE. Cool the medium to 40 – 45°C and dispense into sterilized appropriate containers. The prepared medium should be stored at 8-15°C. The color is amber, slightly opalescent.

The dehydrated medium should be homogeneous, free-flowing and beige in color. If there are any physical changes, discard the medium.

### USES

ROGOSA SL AGAR is used for the isolation, enumeration and identification of lactobacilli in oral bacteriology, feces, vaginal specimens and foodstuffs.

This selective medium, modified by Rogosa to contain high levels of Sodium acetate and Ammonium citrate at a low pH which inhibits most microorganisms, including streptococci and molds and limits swarming but allows the growth of lactobacilli.

Sucrose, Arabinose and Dextrose are fermentable carbohydrates as carbon and energy sources; Tryptone provides nitrogen, vitamins, minerals and amino acids essential for growth. Yeast extract is a source of vitamins, particularly of the B-group. Sulfate salts provide inorganic ions; Polysorbate 80 is a surfactant and is incorporated to neutralize phenols, hexachlorophene and formalin. Monopotassium phosphate acts as a buffer system. Bacteriological agar is the solidifying agent.

Direct inoculation or plate count methodologies can be used. Inoculate medium and incubate at 35 ± 2°C for 24 – 48 hours.

### MICROBIOLOGICAL TEST

The following results were obtained in the performance of the medium from type cultures after incubation at a temperature of 35 ± 2°C and observed after 24– 48 hours.

Microorganisms	Growth
<i>Lactobacillus casei</i> ATCC 9595	Good
<i>Lactobacillus fermentum</i> ATCC 9338	Good
<i>Lactobacillus plantarum</i> ATCC 8014	Good
<i>Lactobacillus leichmannii</i> ATCC 4797	Good
<i>Staphylococcus aureus</i> ATCC 25923	Inhibited

## BIBLIOGRAPHY

Rogosa, M. J. A. Mitchell and R.F. Wiseman. 1951 A selective medium for the isolation and enumeration of oral and fecal lactobacilli. J. Dental Res. 30: 682.

MacFaddin, J. D. 1985. Media for isolation-cultivation-identification-maintenance of medical bacteria, vol. 1. p. 678-680. Williams & Wilkins, Baltimore, M.D.

## STORAGE

Once opened keep powdered medium closed to avoid hydration.

