

ROGOSA SL BROTH

CAT N°: 1234

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

FORMULA IN g/l

Sodium Acetate	15.00	Arabionose	5.00
Tryptone	10.00	Ammonium Citrate	2.00
Dextrose	10.00	Sorbitan Monooleate	1.00
Monopotassium Phosphate	6.00	Magnesium Sulfate	0.57
Yeast Extract	5.00	Manganase Sulfate	0.12
Sucrose	5.00	Ferrous Sulfate	0.03

Final pH 5.4 ± 0.2 at 25°C

PREPARATION

Suspend 60 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 Glacial Acetic Acid and mix well. Distribute in tubes and heat again at 90-100°C for 2-3 minutes. DO NOT AUTOCLAVE. The prepared medium should be stored at 2-8°C. The color is amber.

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

USES

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

Rogosa SL Broth is a modification of media described by Rogosa, Mitchell and Wiseman. Rogosa SL Broth is similar to Rogosa SL Agar (Cat. 1096), but lacks the agar and is very selective due to its high Sodium acetate and Ammonium citrate concentrations and its low pH, which is very advantageous for the cultivation of lactobacilli and 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; Sorbitan Monooleate is a surfactant and is incorporated to neutralize phenols, hexachlorophene and formalin. Monopotassium phosphate acts as a buffer system.

Inoculate medium and incubate at 35 ± 2°C for 18 – 48 hours.

MICROBIOLOGICAL TEST

The following results were obtained from type cultures in the performance of the medium after incubation at a temperature of 35± 2°C and observed after 18-48 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.

