

Rogosa SL Broth

Cat. 1234

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

Practical information

Applications	Categories
Selective enrichment	Lactobacilli
Selective isolation	Lactobacilli

Industry: Clinical / Dairy products

Principles and 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.

Formula in g/L

Dextrose	10	Ferrous sulfate	0,03
Magnesium sulfate	0,57	Manganase sulfate	0,12
Monopotassium phosphate	6	Sodium acetate	15
Sucrose	5	Tryptone	10
Yeast extract	5	Ammonium citrate	2
Arabinose	5	Sorbitan monooleate	1

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.

Instructions for use

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

Quality control

Solubility	Appearance	Color of the dehydrated medium	Color of the prepared medium	Final pH (25°C)
w/o rests	Fine powder	Beige	Amber	5,4±0,2

Microbiological test

Incubation conditions: (35±2 °C / 18-48 h).

Microrganisms	Specification
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Staphylococcus aureus ATCC 25923
Lactobacillus leichmannii ATCC 4797
Lactobacillus plantarum ATCC 8014
Lactobacillus fermentum ATCC 9338
Lactobacillus rhamnosus ATCC 9595

Total inhibition
Good growth
Good growth
Good growth
Good growth

Storage

Temp. Min.:2 °C
Temp. Max.:25 °C

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.