

Rogosa SL Agar

Cat. 1096

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

Practical information

Applications	Categories
Selective enrichment	Lactobacilli

Industry: Clinical / Food

Principles and 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.

Formula in g/L

Dextrose	10	Bacteriological agar	15
Ferrous sulfate	0,03	Magnesium sulfate	0,57
Manganase sulfate	0,12	Monopotassium phosphate	6
Polysorbate 80	1	Sodium acetate	15
Sucrose	5	Tryptone	10
Yeast extract	5	Ammonium citrate	2
Arabinose	5		

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.

Instructions for use

- Direct inoculation or plate count methodologies can be used.
- Inoculate medium and incubate at 35±2 °C for 24-48 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, slightly opalescent	5,4 ± 0,2

Microbiological test

Incubation conditions: (35±2 °C / 24-48 h)

Microorganisms

Specification

Staphylococcus aureus ATCC 25923	Inhibited growth
Lactobacillus plantarum ATCC 8014	Good growth
Lactobacillus fermentum ATCC 9338	Good growth
Lactobacillus rhamnosus ATCC 9595	Good growth

Storage

Temp. Min.:2 °C
Temp. Max.:8 °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.