

## Technical Data Sheet

# ROGOSA Agar (Lactobacillus Selective Agar)

Ordering number: 1.05413.0500

Medium proposed by ROGOSA, MITCHELL and WISEMANN (1951) for the isolation and enumeration of lactobacilli in the oral and intestinal microbial flora, meat, milk and other foodstuffs.

### Mode of Action

The accompanying bacterial flora is largely suppressed by the high acetate concentration and the low pH value. Low concentrations of manganese, magnesium and iron ensure optimal growth of lactobacilli.

### Typical Composition (g/L)

| ROGOSA Agar (Lactobacillus Selective Agar) |       |
|--|-------|
| Peptone from casein                        | 10.0  |
| Yeast extract                              | 5.0   |
| D(+)-glucose                               | 20.0  |
| Potassium dihydrogen phosphate             | 6.0   |
| Ammonium citrate                           | 2.0   |
| Tween® 80                                  | 1.0   |
| Sodium acetate                             | 15.0  |
| Magnesium sulfate                          | 0.575 |
| Iron(II) sulfate                           | 0.034 |
| Manganese sulfate                          | 0.12  |
| Agar-agar**                                | 15.0  |

\*\*Agar-agar is equivalent to other different terms of agar.

### Preparation

Suspend 74.5 g/litre, adjust the pH to 5.5 with acetic acid 96 % (approx. 1.3 ml/litre).

**Do not autoclave.**

pH: 5.5 ± 0.2 at 25°C.

The plates are clear and yellowish-brown.

## Experimental Procedure and Evaluation

Inoculate by the pour-plate technique or by spreading the material on the surface of the culture medium.

Incubation: up to 3 days at 35°C or 5 days at 30°C (SHARPE 1960) under anaerobic conditions in a 5% carbon dioxide atmosphere.

Establish the bacterial count. For the purpose of identification, re-inoculate individual colonies and subject them to the necessary tests (MITSUOKA 1969).

## Storage

Store at +2 °C to +8 °C, dry and tightly closed. Do not use clumped or discoloured medium. Protect from UV light (including sun light). For *in vitro* use only.

## Quality Control

| Control strains                                    | Recovery on test medium.<br>Incubation 48 h, 35°C, aerobic<br>(Bifidobacterium anaerobic) |
|--|---|
| Lactobacillus acidophilus ATCC4356<br>(WDCM 00098) | ≥ 70 %  |
| Lactobacillus casei ATCC 393<br>(WDCM 00100)       | ≥ 70 %  |
| Lactobacillus fermentum ATCC 9338                  | ≥ 70 %  |
| Lactobacillus plantarum ATCC 8014                  | ≥ 70 %  |
| Bifidobacterium bifidum ATCC 11863                 | ≥ 70 %  |
| Escherichia coli ATCC 11775<br>(WDCM 00090)        | ≤ 0.01 %  |
| Proteus hauseri ATCC 13315                         | ≤ 0.01 %  |
| Enterococcus faecalis ATCC 11700                   | ≤ 0.01 %  |

Please refer to the actual batch related Certificate of Analysis.

A recovery rate of 70 % is equivalent to a productivity value of 0.7.



*Lactobacillus acidophilus* ATCC 4356



*Lactobacillus fermentum* ATCC 9338



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## Literature

MITSUOKA, T.: Vergleichende Untersuchungen über Lactobazillen aus den Faeces von Menschen, Schweinen und Hühnern. - **Zbl. Bakt. I. Orig.**, **210**; 32-51 (1969).

ROGOSA, M.; MITCHEL, J.A., a. WISEMAN, R.F.: A selective medium for the isolation of oral und faecal lactobacilli. - **J. Bacteriol.** **62**; 132-133 (1951).

SHARPE, M.E.: Selective media for the isolation and enumeration of lactobacilli. - **Lab. Practice**, **9**; 223-227 (1960).

## Ordering Information

| Product                                    | Cat. No.     | Pack size |
|--|--------------|-----------|
| ROGOSA Agar (Lactobacillus Selective Agar) | 1.05413.0500 | 500 g     |
| Acetic acid min. 96 %                      | 1.00062.1000 | 1 l       |

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