Rogosa Agar



Medium used for the isolation and cultivation of Lactobacilli.

CONTENTS (Liter)

| Pancreatic Digest of Casein | 10.0 g |
|--|---------|
| Yeast Extract | 5.0 g |
| Potassium Dihydrogen Phosphate | 6.0 g |
| Ammonium Citrate | 2.0 g |
| Glucose | 20.0 g |
| Sodium Acetate | 15.0 g |
| Magnesium Sulfate | 0.575 g |
| Manganese Sulfate | 0.12 g |
| Ferrous Sulfate | 0.034 g |
| Agar | 15.0 g |
| Final pH = 5.4 ± 0.2 at 25° C | |

PROCEDURE

Suspend 73.73 G of powder in 1 L of distilled or deionized water. Add 1 mL of Tween 80 supplement (MB-T1861) and 1.32 mL of Glacial Acetic Acid supplement (MB-G0743). Heat to boiling until completely dissolved. DO NOT AUTOCLAVE. Cool to 45 - 50°C in water bath. Mix well. Pour into petri dishes.

INTERPRETATION

Rogosa Agar is a medium used for the isolation and cultivation of Lactobacilli. Pancreatic digest of casein, yeast extract provide nitrogen, amino acids and other nitrogenous compounds. Potassium dihydrogen phosphate buffers the medium. Ammonium citrate, sodium acetate and glacial acetic acid inhibit most bacteria like streptococci and other contaminating organisms and make this medium the low pH. Glucose is the carbohydrate. Magnesium sulfate, manganese sulfate and ferrous sulfate provide inorganic ions in the medium. Agar is the solidifying agent. Tween 80 provides fatty acids essential for the growth of lactobacilli.

TECHNIC

Inoculate the specimen using a sterile loop to the medium. Incubate at 36 \pm 1 $^{\circ}$ C for 2 - 3 days under microaerobic condition. Refer appropriate references for recommended test procedure.

QUALITY CONTROL FOR USE

<u>Dehydrated medium</u>

Appearance: free-flowing, homogeneous

Color: beige Prepared medium

Appearance: slightly opalescent, may have slight precipitates

Color: light amber

Incubation conditions: 36 \pm 1 $^{\circ}\text{C}$ / 2 - 3 days under microaerobic condition

| Microorganism | ATCC | Inoculum CFU | Growth |
|-------------------------|-------|------------------|-----------|
| Lactobacillus plantarum | 8014 | 50-100 | good |
| Escherichia coli | 25922 | ≥10 ³ | inhibited |
| Staphylococcus aureus | 25923 | ≥10 ³ | inhibited |

STORE

The powder is very hygroscopic. Store the powder at room temperature, in a dry environment, in its original container tightly closed and use it before the expiry date on the label. Store prepared medium at 2 - 8°C.

REFERENCES

- 1. Rogosa, M., J.A. Mitchell, and R.F. Wiseman, (1971) J. Bacteriol. 62: 132.
- 2. Rogosa, M., J.A. Mitchell, and R.F. Wiseman, (1951). J. Dental Res. 30: 682.
- 3. ISO/TC34/SC6/WG15. (1984). Enumeration of Lactobacteriaceae in meat and meat products.
- 4. Sharpe M.E. (1960) Lab. Practice 9: 223-227.

PACKAGE

| Cat. No : MB-R1176 Rogosa Agar | 500 G |
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