Lactic Phage Broth

M968

Lactic Phage Medium (Broth) is used for enumeration of bacteriophages active against starter cultures used in cheese manufacturing.

Composition**

Ingredients	Gms / Litre
Casein enzymic hydrolysate	10.000
Yeast extract	5.000
Beef extract	5.000
Lactose	10.000
Dipotassium phosphate	5.000
Final pH (at 25°C)	6.8±0.2

**Formula adjusted, standardized to suit performance parameters

Directions

Suspend 35 grams in 1000 ml distilled water. Heat if necessary to dissolve the medium completely. Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes.

Principle And Interpretation

Lactic streptococci are of critical importance to the dairy fermentation industry because these bacteria supply the lactic acid for the curd production and their metabolic products impart characteristic and desirable flavors. Bacteriophages play a vital role as they infect thestarter cultures resulying in insufficient acid production(1)

This medium is recommended for the bacteriophage detection Casein enzymic hydrolysate, yeast extract and beef extract provides all the essential nutrients especially nitrogenous sources for the organisms. Dipotassium phosphate is the buffering agent and lactose is the carbon source in the medium.

Quality Control

Appearance
Cream to yellow coloured homogeneous free flowing powder

Colour and Clarity of prepared medium
Light amber coloured clear to slightly opalescent gel forms in Petri plates.

Reaction
Reaction of 3.5% w/v aqueous solution at 25°C. pH : 6.8±0.2

pH
6.60-7.00

Cultural Response
M968: Cultural characteristics observed after an incubation at 30°C for 18.

Organism	Growth
Leuconostoc dextranicum	good-luxuriant
Streptococcus cremoris ATCC 19257	good-luxuriant
Lactobacillus lactis ATCC 8000	luxuriant
Streptococcus thermophilus ATCC 14485	good-luxuriant

Storage and Shelf Life

Store below 30°C in tightly closed container and the prepared medium at 2-8°C. Use before expiry date on the label.

Reference

1.Elliker,P.R. 1950. The problem of bacteriophage in the dairy industry. p.24-29. Proc. 11th Annu. Biol. Colloq., Oregon State Univ.

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