M17 Broth

Medium used for the isolation and cultivation of lactic Streptococci.

• CONTENTS (Liter)

Tryptone	2.5 g
Soytone	5.0 g
Peptone	2.5 g
Meat Extract	5.0 g
Yeast Extract	2.5 g
Lactose	5.0 g
Ascorbic Acid	0.5 g
Magnesium Sulfate	0.25 g
Disodium-β-Glycerophosphate	19.0 g

Final pH = 7.2 ± 0.2 at 25°C

• PROCEDURE

Suspend 42.25 G of powder in 1 L of distilled or deionized water. Heat to boiling until completely dissolved. Sterilize by autoclave at 121°C for 15 minutes. Cool to 45 - 50°C in water bath. Mix well. Pour into tubes.

• INTERPRETATION

M17 Broth is a medium used for the isolation and cultivation of lactic Streptococci. Tryptone, soytone, peptone, meat extract and yeast extract provide nitrogen, carbon, vitamins and minerals. Ascorbic acid stimulates the growth of lactic Streptococci. Magnesium sulfate provides essential ions to the organisms. Lactose is a carbohydrate source. Lactose fermenting microorganisms acidify the medium and disodium-β-glycerophosphate acts as a buffering agent. To buffer the medium is important to lactic Streptococci, because the low pH reduces the growth of lactic Streptococci. Also, disodium-β-glycerophosphate suppresses Lactobacilli.

• TECHNIC

Inoculate the specimen using a sterile needle to the medium. Incubate at 35 ± 2°C for 24 - 48 hours. Refer appropriate references for recommended test procedure.

• QUALITY CONTROL FOR USE

Dehydrated medium
Appearance: free-flowing, homogeneous
Color: light beige
Prepared medium
Appearance: clear to slightly opalescent
Color: light amber
Incubation conditions: 35 ± 2°C / 24 - 48 hours

Microorganism	ATCC	Inoculum CFU	Growth
Streptococcus thermophilus	19258	50-100	good
Lactobacillus bulgaricus	11842	50-100	none to poor

• 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.

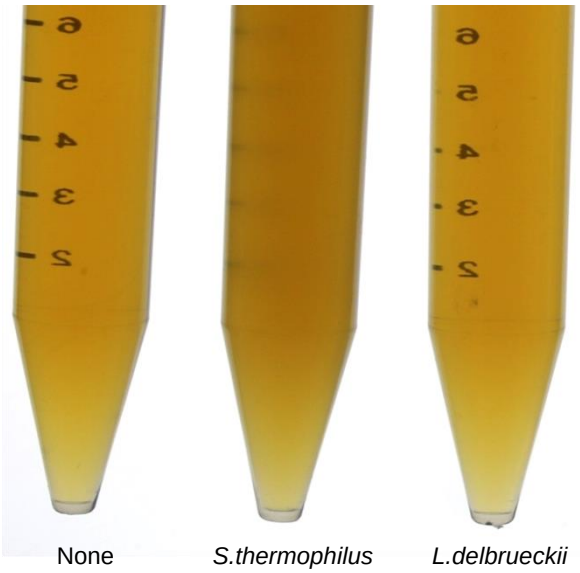
• REFERENCES

1. International Dairy Federation. 1981. Joint IDF/ISO/AOAC Group E44.
2. Terzaghi, B.E., and W.E. Sandine. 1975. Appl. Microbiol. 29: 807-813.
3. Anderson A.W. and Elliker P. R. (1953) J. Dairy Science 36. 161-167
4. Reiter B. and Oran J. D. (1962) J. Dairy Res. 29:63

• PACKAGE

Cat. No : MB-M2199 M17 Broth	500 G

• MICROBIAL CULTURE IMAGES



None | *S.thermophilus* ATCC 19258 (100 CFU) | *L.delbrueckii* ATCC 11842 (100 CFU)

Incubation conditions : 35 ± 2°C / 24 - 48 hours

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