

LBS (Lactobacillus Selection) Broth



Medium used for the isolation and cultivation of Lactobacilli spp.

• CONTENTS (Liter)

Pancreatic Digest of Casein	10.0 g
Yeast Extract	5.0 g
Dextrose	20.0 g
Monopotassium Phosphate	6.0 g
Ammonium Citrate	2.0 g
Sodium Acetate Hydrate	25.0 g
Magnesium Sulfate	0.575 g
Manganese Sulfate	0.12 g
Ferrous Sulfate	0.34 g
Tween 80	1.0 g

Final pH = 5.4 ± 0.2 at 25°C.

• PROCEDURE

Suspend 70.04 G of powder in 1 L of distilled or deionized water. Add 1.32 mL of Glacial Acetic Acid supplement (MB-G0743). Mix well. DO NOT AUTOCLAVE. Heat to boiling until completely dissolved. Cool to 45 - 50°C in water bath. Mix well. Pour into tubes.

Glacial Acetic Acid supplement

1 vial contents

Glacial Acetic Acid 15.0 mL

• INTERPRETATION

LBS (Lactobacillus Selection) Broth is used for the isolation and cultivation of Lactobacilli spp. Pancreatic digest of casein, yeast extract and dextrose provide nitrogen, carbon, amino acids, and vitamins. Ammonium citrate and sodium acetate hydrate inhibit the growth of many organisms. Monopotassium phosphate is a buffering agent. Magnesium sulfate, manganese sulfate and ferrous sulfate provide essential ions for growth. Tween 80 is a source of growth factors. Glacial acetic acid provides low pH of the medium for inhibition of other bacterial flora and favors the isolation of lactobacilli.

• TECHNIC

Inoculate the specimen with stab using a sterile needle to the medium. Shake gently for spreading microorganism. Incubate at 35 ± 2°C for 42 - 48 hours under microaerobic condition. Refer appropriate references for recommended test procedure.

• QUALITY CONTROL FOR USE

Dehydrated medium

Appearance: slightly clumped and moist, homogeneous

Color: beige

Prepared medium

Appearance: moderately hazy, slight precipitate

Color: yellow to tan

Incubation conditions: 35 ± 2°C / 42 - 48 hours under microaerobic condition

Microorganism	ATCC	Inoculum CFU	Growth
<i>Lactobacillus acidophilus</i>	4356	50-100	good
<i>Lactobacillus plantarum</i>	8014	50-100	good
<i>Proteus vulgaris</i>	8427	50-100	partially inhibition

• 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 or until signs of deterioration or contamination are evident. Store prepared medium at 2 - 8°C.

• REFERENCES

1. Rogosa, Mitchell and Wiseman. 1951. J. Bacteriol. 62:132.
2. Rogosa, Mitchell and Wiseman. 1951. J. Dental Res. 30:682.
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4. Ellis and Sarles. 1958. J. Bacteriol. 75:272.
5. Rogosa and Sharpe. 1960. J. Gen. Microbiol. 23:197.
6. Downes and Ito (ed.). 2001. Compendium of methods for the microbiological examination of foods, 4th ed. American Public Health Association, Washington, D.C.
7. Marshall (ed.). 1993. Standard methods for the examination of dairy products, 16th ed. American Public Health Association, Washington, D.C.
8. Sabine and Vaselekos. 1965. Nature 206:960.
9. MacFaddin. 1985. Media for isolation-cultivation-identification-maintenance of medical bacteria, vol. 1. Williams & Wilkins, Baltimore, Md.

• PACKAGE

Cat. No : MB-L0909 LBS (Lactobacillus Selection) Broth	500 G
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