

Liver Agar



Medium used for the isolation and cultivation of *Brucella* spp. and other pathogenic organisms.

*Equally use with MFDS (MB-L1386K) and QIA (MB-L1386Q).

• CONTENTS (Liter)

Beef Liver Infusion	20.0 g
Proteose Peptone	10.0 g
Sodium Chloride	5.0 g
Agar	20.0 g
Final pH = 6.9 ± 0.2 at 25°C	

• PROCEDURE

Suspend 55.0 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. Aseptically add 2 vials of Liver Agar supplement (MB-L0802). Mix well. Pour into petri dishes.

Liver Agar supplement

1 vial contents (each vial is sufficient for 500mL of medium)

Bacitracin	12,500 IU
Vancomycin	0.01 g
Polymyxin B	2,500 IU
Nalidixic Acid	0.0025 g
Cycloheximide	0.05 g

• INTERPRETATION

Liver Agar is a medium used for the isolation and cultivation of *Brucella* spp. and other pathogenic organisms. Beef liver Infusion and proteose peptone provide the nitrogen, amino acids, vitamins and carbon sources. Sodium chloride maintains the osmotic balance. Agar is the solidifying agent. Liver agar supplement is broad-spectrum antibiotics.

• TECHNIC

Inoculate the plates with spreading the specimen on surface of the medium using a sterile loop. Incubate at 37°C for 3 - 5 days under 5-10% CO₂ condition. Refer appropriate references for recommended test procedure.

• QUALITY CONTROL FOR USE

Dehydrated medium

Appearance: free-flowing, homogeneous

Color: dark beige

Prepared medium

Appearance : opalescent

Color: dark amber

Incubation conditions: 37°C / 3 - 5 days under 5-10% CO₂ condition

Microorganism	ATCC	Inoculum CFU	Growth
<i>Brucella abortus</i>	NCCP 10040	50-100	good
<i>Brucella suis</i>	4314	50-100	good
<i>Streptococcus mitis</i>	9895	50-100	good

• 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 are evident. Store prepared medium at 2 - 8°C.

• REFERENCES

1. Shapiro and Wong. 1999. *In* Murray, Baron, Pfaller, Tenover and Tenover (ed.), Manual of clinical microbiology, 7th ed. American Society for Microbiology, Washington, D.C.
2. Carter. 1979. Diagnostic procedures in veterinary bacteriology and mycology, 3rd ed. Charles C. Thomas, Springfield, Ill.
3. MacFaddin. 1985. Media for isolation-cultivation-identification-maintenance of medical bacteria, vol. 1. Williams & Wilkins, Baltimore, Md.
4. Forbes, Sahm and Weissfeld. 1998. Bailey & Scott's diagnostic microbiology, 10th ed. Mosby, Inc., St. Louis, Mo.
5. Cleveland and Sanders. 1930. Arch. Protietenkd. 70:223.
6. Refer to the MFDS and the QIA.

• PACKAGE

Cat. No : MB-L1386 Liver Agar	500 G
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