

# Liver Agar



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

\*Equally use with MFDS (MB-L1386K).

## • 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. If necessary, 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 cultivation and enumeration of *Brucella* spp. and other pathogenic organisms. Beef liver Infusion and proteose peptone provide 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 specimen using a sterile loop to the medium. Incubate at 37°C for 3 - 5 days under microaerobic condition (\*anaerobic condition). Refer appropriate references for recommended test procedure.

## • QUALITY CONTROL FOR USE

### Dehydrated medium

Appearance: free-flowing, homogeneous

Color: beige

### Prepared medium

Appearance : slightly opalescent

Color: amber

Incubation conditions: 37°C / 3 - 5 days under microaerobic condition (\*anaerobic condition)

Microorganism	ATCC	Inoculum CFU	Growth	
			w/o supplement	w/ supplement
<i>Brucella abortus</i>	NCCP 10040	50-100	good	good
* <i>Clostridium sporogenes</i>	11437	50-100	good	inhibited
<i>Streptococcus mitis</i>	49456	50-100	good	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. 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.

## • PACKAGE

Cat. No : MB-L1386 Liver Agar	500 G
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