

TM 166 – LIVER INFUSION AGAR

INTENDED USE

For cultivation of *Brucella* and other pathogenic anaerobic bacteria.

PRODUCT SUMMARY AND EXPLANATION

Brucella, a gram-negative intracellular parasite causes epizootic abortions in animals and septicemic febrile illness or localized infection of bone, tissue or organ systems in humans. *Brucella* species are the causative agents of Brucellosis, a zoonotic disease with a domestic animal reservoir. Tryptose Agar with 5% serum remains the media of choice for isolation of *Brucella* species. However, the growth is highly enhanced when grown on Liver Infusion or Brucella Agar, due to the high nutritive content of the infusion media. Further enhancement of growth can be achieved by the addition of 5% horse or rabbit serum to the medium. While isolating *Brucella* species from samples such as contaminated milk, inhibition of accompanying gram-positive bacteria is attained by the addition of crystal violet. Half strength Liver Infusion Agar can be used for the isolation of *Entamoeba histolytica*.

COMPOSITION

Ingredients	Gms / Ltr
Beef liver, infusion from	500.000
Proteose peptone	10.000
Sodium chloride	5.000
Agar	20.000

PRINCIPLE

This medium contains Beef liver, infusion from and proteose peptone which provide the nitrogen, amino acids, vitamins and carbon sources which permit luxuriant growth of *Brucella* and other fastidious pathogens. Sodium chloride maintains the osmotic balance. The reducing substances present in liver tissue create an anaerobic environment, which satisfies the requirements of even fastidious anaerobes.

INSTRUCTION FOR USE

- Dissolve 55.0 grams in 1000 ml distilled water.
- Heat to boiling to dissolve the medium completely.
- Sterilize by autoclaving at 15 psi pressure (121°C) for 15 minutes. Cool to 45-50°C.
- Mix well and pour into sterile Petri plates.

QUALITY CONTROL SPECIFICATIONS

Appearance of Powder	: Light yellow to light brown homogeneous free flowing powder.
Appearance of prepared medium pH (at 25°C)	: Amber coloured clear to slightly opalescent gel forms in Petri plates. : 6.9 ± 0.2

INTERPRETATION

Cultural characteristics observed after incubation (*Clostridium* species incubate anaerobically).



Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Recovery	Incubation Temperature	Incubation Period
<i>Brucella melitensis</i>	4309	50-100	Luxuriant	≥70%	35-37°C	24-48 Hours
<i>Brucella suis</i>	6597	50-100	Luxuriant	≥70%	35-37°C	24-48 Hours
<i>Streptococcus mitis</i>	9895	50-100	Luxuriant	≥70%	35-37°C	24-48 Hours
<i>Clostridium sporogenes</i>	11437	50-100	Luxuriant	≥70%	35-37°C	24-48 Hours

PACKAGING:

In pack size of 100 gm and 500 gm bottles.

STORAGE

Dehydrated powder, hygroscopic in nature, store in a dry place, in tightly-sealed containers between 25-30°C and protect from direct sunlight. Under optimal conditions, the medium has a shelf life of 4 years. When the container is opened for the first time, note the time and date on the label space provided on the container. After the desired amount of medium has been taken out replace the cap tightly to protect from hydration.

Product Deterioration: Do not use if they show evidence of microbial contamination, discoloration, drying or any other signs of deterioration.

DISPOSAL

After use, prepared plates, specimen/sample containers and other contaminated materials must be sterilized before discarding.

REFERENCES

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4. Isenberg, H.D. Clinical Microbiology Procedures Handbook 2nd Edition.
5. Jorgensen, J.H., Pfaller, M.A., Carroll, K.C., Funke, G., Landry, M.L., Richter, S.S and Warnock., D.W. (2015) Manual of Clinical Microbiology, 11th Edition. Vol. 1.
6. Murray P. R., Baron J. H., Pfaller M. A., Jorgensen J. H. and Tenover F. C., (Eds.), 2003, Manual of Clinical Microbiology, 8th Ed., American Society for Microbiology, Washington, D.C.



GMP Good Manufacturing Practices Certified	IVD For In Vitro Diagnostic Use	QTY. Quantity	LOT/ B. NO. Lot / Batch Number	REF Catalogue Number	 Manufacturer
 Temperature Unit	EC REP MedNet GmbH Buckstrasse 10 48163 Muenster, Germany Authorized Representative	 European Conformity	 QR Code	 Consults Instructions for Use	 Best Before

NOTE: Please consult the Material Safety Data Sheet for information regarding hazards and safe handling Practices.

***For Lab Use Only**
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