

## TM 167 – LIVER INFUSION BROTH

### INTENDED USE

For cultivation of *Brucella* and other 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 media. Half strength Liver Infusion Broth 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

### 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 Beef Liver infusion create an anaerobic environment, which satisfies the requirements of even fastidious anaerobes. *Brucella* species are highly infectious and extreme care should be taken while handling the cultures.

### INSTRUCTION FOR USE

- Dissolve 35.0 grams in 1000 ml distilled water.
- Heat if necessary to dissolve the medium completely.
- Dispense into sterile tubes or flasks as desired and Sterilize by autoclaving at 15 psi pressure (121°C) for 15 minutes.

### QUALITY CONTROL SPECIFICATIONS

<b>Appearance of Powder</b>	: Light yellow to brownish yellow homogeneous free flowing powder.
<b>Appearance of prepared medium</b>	: Amber coloured clear solution in tubes.
<b>pH (at 25°C)</b>	: 6.9 ± 0.2

### INTERPRETATION

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

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Incubation Temperature	Incubation Period

<i>Brucella melitensis</i>	4309	50-100	Luxuriant	35-37°C	24-48 Hours
<i>Brucella suis</i>	4314	50-100	Luxuriant	35-37°C	24-48 Hours
<i>Streptococcus mitis</i>	9811	50-100	Luxuriant	35-37°C	24-48 Hours
<i>Clostridium sporogenes</i>	11437	50-100	Luxuriant	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**

1. Cleveland L. R. and Sanders E. P., 1930, Arch. Protietenkd. 70:223.
2. Forbes B. A., Sahn A. S., and Weissfeld D. F., Bailey & Scotts Diagnostic Microbiology, 10th Ed., 1998, Mosby, Inc., St. Louis, Mo.
3. Moyer N. P. and Holcomb L. A., 1988, Brucellosis, p. 143-154, In Balows A., Hausler W. J., Jr. Ohashi M. and Turano A. (Eds.), Laboratory Diagnosis and Infectious Diseases: Principle and Practice, Vol. I., Springer-Verlag, New York.
4. 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.
5. Smith, L. D. and Fiecht T. A., 1990, Pathogenesis of Brucella. Crit. Rev. Microbiol., 17: 209-230.

 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 Authorized Representative <small>MedNet GmbH Borkstrasse 10, 48163 Muenster, Germany</small>	 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**  
Revision: 08 Nov., 2019

