

## TM 1513 – BRUCELLA AGAR BASE W/ 1.0% DEXTROSE

### INTENDED USE

For cultivation of *Brucella species* and for isolation and subculture of anaerobes by adding blood.

### PRODUCT SUMMARY AND EXPLANATION

Brucellosis is a zoonotic disease with a domestic animal reservoir. It is an occupational disease of veterinarians, microbiologists, farmers etc. The route of infections is genital, nasopharyngeal, gastrointestinal, conjunctival, respiratory and through abraded skin. Brucellosis in humans has a variable incubation period, an insidious or abrupt onset and no pathognomic symptoms or signs. Brucella Agar was designed for cultivating *Brucella species* from diagnostic specimens. With the incorporation of blood or other nutritious substances, it facilitates the cultivation of variety of fastidious anaerobic organisms. However, Brucella Medium is supplemented with antibiotics to prevent overgrowth of other accompanying organisms. Brucella Agar Base w/ 1.0% Dextrose was originally developed by Jones and Morgan for preparations of serum-dextrose-antibiotic medium used for the isolation and cultivation of *Brucella species*.

### COMPOSITION

Ingredients	Gms / Ltr
Peptic digest of animal tissue	10.000
Meat extract	5.000
Dextrose	10.000
Sodium chloride	5.000
Agar	15.000

### PRINCIPLE

The medium contains peptic digest of animal tissue and meat extract, which facilitates cultivation of variety of fastidious anaerobic organisms; by providing essential nutrients. Dextrose serves as source of energy. Addition of antibiotics makes the medium highly selective for *Brucella species*.

### INSTRUCTION FOR USE

- Dissolve 22.5 grams in 500 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 and aseptically add sterile 5% (v/v) inactivated horse serum by heating at 56°C for 30 minutes) and rehydrated contents of one vial Brucella Selective Supplement.
- Mix well before pouring into sterile Petri plates.

### QUALITY CONTROL SPECIFICATIONS

<b>Appearance of Powder</b>	: Cream to yellow homogeneous free flowing powder.
<b>Appearance of prepared medium</b>	: Light yellow coloured, clear to slightly opalescent gel forms in Petri plates.
<b>pH (at 25°C)</b>	: 7.5±0.2

### INTERPRETATION

Cultural characteristics observed after incubation in presence of 10% Carbon dioxide atmosphere with added 5% sterile inactivated horse serum and Brucella Selective Supplement.



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>	4314	50-100	Luxuriant	>=70%	35-37°C	24-48 Hours
<i>Escherichia coli</i>	25922	>=10 <sup>4</sup>	Inhibited	0%	35-37°C	24-48 Hours
<i>Staphylococcus aureus</i>	25923	>=10 <sup>4</sup>	Inhibited	0%	35-37°C	24-48 Hours

#### PACKAGING:

In pack size of 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. Murray P. R., Baron E. J., Jorgensen J. H., Tenover F. C., Tenover F. C., (Eds.), 8th Ed., 2003, Manual of Clinical Microbiology, ASM, Washington, D.C.
2. Young E. J., 1983, Human Brucellosis, Rev. Infect. Dis., 5:821-842
3. Atlas R. M., 1997, Handbook of Microbiological Media, 2nd Ed., Parks L.C. (Ed.), CRC Press, New York.
4. Jones Lois M. and Brinley Morgan W. J., 1958, Bull. Wld. Hlth. Org., 19:200-203
5. Alton G. G. and Jones L. M., 1967, Lab Technique in Brucellosis, WHO, Geneva.

 Good Manufacturing Practices Certified	 For In Vitro Diagnostic Use	 Quantity	 Lot / Batch Number	 Catalogue Number	 Manufacturer
 Temperature Unit	 Authorized Representative <small>MedNet GmbH Barkstrasse 10, 49163 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**  
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