Chaitanya Group Of Industries

ReadyMED®
Dehydrated Cell Culture Media

Technical Data Sheet

Brucella Agar Base RDM-BAB-01

Principle
Brucella agar base is composed of peptone, tryptone, yeast extract, dextrose, sodium chloride, sodium bisulphite and agar. Peptone and tryptone provides nitrogen and amino acids. Yeast extract adds essential vitamins. Dextrose is a carbon source; Sodium Bisulfite is a reducing agent and enhances growth. Sodium Chloride maintains the osmotic balance. Agar is the solidifying agent. The media can be enriched with blood (5-10%), which provides additional growth factors for fastidious microorganisms and is used to determine hemolytic reactions.

Use: Recommended for enrichment, isolation and cultivation of *Brucella* or *Campylobacter* species from clinical and non-clinical specimens.

Contents*

Ingredients	**Gram/Litre**
Tryptone	10.00
Peptone	10.00
Yeast extract	2.00
Dextrose	1.00
Sodium chloride	5.00
Sodium bisulphite	0.10
Agar	15.00
pH at 25˚C	7.0 ±0.2

* Formula adjusted for optimum performance and parameters

Directions: Dissolve 43.00 grams in 1000 ml distilled water. Boil to dissolve the medium completely and sterilize by autoclaving at 15 lbs. pressure (121°C) for 15 min, cool it to 42-45 °C and distribute in petri plates and allow to solidify. Ensure complete solidification and inoculate test sample aseptically.
Elective: To prepare Brucella Blood Agar, aseptically add 5-10% sterile defibrinated blood at 45-50°C. Mix well.

Specimens types analyzed
Pharmaceutical samples, clinical and non-clinical samples etc.

Precautions to be taken
These microbial media are intended for the in-vitro use only. All the handling, experiments, storage, and discarding should be performed with the help of skilled and knowledgeable technicians and as per the established guidelines. The material should be disposed only after proper sterilization by autoclaving. Please go through the MSDS of the media to avoid any accidents or in emergency.

Performance and Evaluation
The expected performance of the medium is liable to use as per the direction on the label when stored at optimum conditions and within expiry date.

Quality Control

Appearance	Beige colored free flowing, hygroscopic homogeneous powder
Reaction of 4.3% solution	7.0 ±0.2 at 25 ˚C
pH	6.80- 7.20

Gelling	Firm comparable with 1.5% agar gel
Color and clarity of ready medium	Light yellow to creamy colored opalescent gel
Growth Promotion properties	Best at ≤ 100 CFU at 32-37 ºC for 18-72 h
Indicative properties	Optimum at ≤ 100 CFU at 32-37 ºC for 18-48 h
Negative control	Performed using sterile distilled water

Different Microbial Response

Organism	Inoculum	Growth	Recovery	Incubation Temperature	Incubation period
Brucella abortus (ATCC 4315)	50-100	Luxurious	70-80%	33-37 ℃	18-48 h

Storage and Shelf Life

Hygroscopic; keep container tightly closed. Store in cool dry place.

Disposal: To avoid the contamination or propagation of any hazardous microbes the used, unusable or modified preparation of this product must be disposed after autoclaving after completion of task.

Reference

1. Atlas, R. M. (2005). *Handbook of media for environmental microbiology*. CRC press.
2. *Difco Manual* (1998). 11th Edition. Difco Laboratories., Division of Becton Dickinson and Company, Sparks, Maryland, USA.
3. Rand, M. C., Arnold E. Greenberg, and Michael J. Taras, (1976), *Standard methods for the examination of water and wastewater*. Prepared and published jointly by American Public Health Association, American Water Works Association, and Water Pollution Control Federation.
4. MacFaddin, J. D. (1985). *Media for isolation-cultivation identification-maintenance of medical bacteria*, vol. 1, p.110-114. Williams & Wilkins, Baltimore, MD.

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