

Brucella Agar Base

Intended Use

Brucella Agar Base is recommended for enrichment, isolation and cultivation of *Brucella* or *Campylobacter* species from clinical and non-clinical specimens.

Summary

Brucella Agar was developed for the cultivation of *Brucella* species from diagnostic specimens, such as blood, and from foods and other potentially contaminated material. Brucella Agar with 5% Horse Blood plates are particularly useful for the cultivation of the more fastidious aerobic and anaerobic microorganisms, including *Streptococci*, *Pneumococci*, *Listeria*, *Neisseria meningitidis* and *Haemophilus influenzae*.

Principle

Brucella Agar Base medium consists of casein enzymic hydrolysate and peptone which provide organic nitrogen. Yeast extract serves as a source of vitamin B complex, and additionally it also supplies some nitrogenous nutrients. Sodium bisulphite is a reducing agent and sodium chloride helps to maintain the osmotic equilibrium of the medium. Dextrose serves as an energy source. The medium can also be enriched with 5 % v/v sterile defibrinated horse blood. For selective isolation of *Brucella* species antibiotic mixtures in the form of freeze-dried supplements are incorporated into the base.

Formula*

Ingredients	g/L
Pancreatic Digest of Casein	10.0
Peptic Digest of Animal Tissue	10.0
Dextrose	1.0
Yeast Extract	2.0
Sodium Chloride	5.0
Sodium Bisulfite	0.1
Agar	15.0
Final pH (at 25°C)	7.0 ± 0.2

*Adjusted to suit performance parameters

Storage and Stability

Store dehydrated medium below 30°C in tightly closed container and the prepared medium at 2°C-8°C. Avoid freezing and overheating. Use before expiry date on the label. Once opened keep powdered medium closed to avoid hydration.

Type of specimen

Clinical samples – Blood

Specimen Collection and Handling

Ensure that all samples are properly labelled.

Follow appropriate techniques for handling samples as per established guidelines.

Some samples may require special handling, such as immediate refrigeration or protection from light, follow the standard procedure.

The samples must be stored and tested within the permissible time duration.

After use, contaminated materials must be sterilized by autoclaving before discarding

Directions

1. Suspend 21.55 g of the powder in 500 mL purified / distilled water.
2. Mix thoroughly.
3. Heat with frequent agitation and boil for 1 minute to completely dissolve the powder.
4. Sterilize by autoclaving at 121°C (15 psi) for 15 minutes as per validated cycle.
5. If required, aseptically add rehydrated contents of one vial of Brucella Selective Supplement (204020680005).

6. For preparation of blood plates, add 5 to 10% sterile defibrinated blood to sterile agar which has been cooled to 45°C-50°C.

Quality Control

Dehydrated Appearance: Light yellow to yellow coloured, homogenous, free flowing powder.

Prepared Appearance: Basal medium: Light yellow to dark yellow coloured, slightly opalescent gel forms in petridishes. With addition of 5% defibrinated horse blood: Cherry red opaque gel forms in petridishes.

Cultural Response: Growth is observed after an incubation at 35°C±2°C for 3 days with 3-5% CO₂ (incubate *S. aureus* without CO₂).

Organisms (ATCC)	Growth
<i>Brucella abortus</i> (11192)	Good
<i>Brucella melitensis</i> (4309)	Good
<i>Brucella suis</i> (4314)	Good
<i>Staphylococcus aureus</i> subsp. <i>aureus</i> (25923)	Good
<i>Streptococcus pyogenes</i> Strain Bruno (19615)	Good
<i>Streptococcus pneumoniae</i> (6305)	Good

Performance and Evaluation

Performance of the product is dependent on following parameters as per product label claim:

1. Directions
2. Storage
3. Expiry

Precautions/Limitations

All presumptive anaerobic organisms must be identified by confirmatory test.

Warranty

This product is designed to perform as described on the label and package insert. The manufacturer disclaims any implied warranty of use and sale for any other purpose.

Reference

1. Jones L. M. and Brinley M. W. J., 1958, Bull. Wld. Hlth. Org., 19:200.
2. Kuzdas C. D., and Morse E. V., 1953, J. Bacteriol., 66 (4):502
3. Data on file: Microxpress®, A Division of Tulip Diagnostics (P) Ltd.

Product Presentation:

Cat No.	Product description	Pack Size
201020340500	Dehydrated Culture Media	500 g

Disclaimer

Information provided is based on our inhouse technical data on file, it is recommended that user should validate at his end for suitable use of the product.
