

Brucella Broth 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 Broth Base is formulated so as to support luxuriant growth of fastidious bacteria like *Brucella* species. *Brucella* is an intracellular parasite that causes epizootic abortions in animals and septicemic febrile illness or localized infections of bone, tissue or organ systems in humans. *Brucella* species are highly fastidious and therefore require a nutrient rich medium to be able to grow.

Principle

Peptic digest of animal tissue and pancreatic digest of casein provide organic nitrogen to the organisms. Yeast extract also supply some nitrogenous nutrients but mainly it serves as a source of Vitamin B complex. Dextrose serves as an energy source. It is suggested that half the tubes to be incubated in the normal atmosphere, and half in a 10% CO₂ enriched atmosphere.

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
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 – faeces

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 28.10 g of the powder in 1000 mL purified / distilled water.
2. Heat if necessary, to dissolve the powder completely.
3. Sterilize by autoclaving at 121°C (15 psi) for 15 minutes as per validated cycle.
4. Cool to 45°C-50°C and aseptically add sterile 5% v/v inactivated horse serum (Inactivate by heating at 56°C for 30 minutes) and add rehydrated contents of one vial of Brucella Selective Supplement (204020680005).
5. Mix well before pouring into sterile tubes.

Quality Control

Dehydrated Appearance: Cream to yellow coloured, fine, homogeneous, free of extraneous material.

Prepared Appearance: Pale to medium, tan to yellow coloured, clear to slightly hazy.

Cultural Response: Cultural characteristics observed after an incubation at 35°C-37°C for 7 days with 3-5% CO₂.

Organisms (ATCC)	Growth
<i>Brucella abortus</i> (11192)	Good
<i>Brucella melitensis</i> (4309)	Good
<i>Brucella suis</i> (4314)	Good
<i>Streptococcus pyogenes</i> Strain Bruno (19615)	Good

Performance and Evaluation

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

1. Directions
2. Storage
3. Expiry

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. Bact., 66 (4):502.
3. Renoux G., 1954, Ann. Inst. Pasteur, 87 (3):325.
4. Data on file: Microxpress[®], A Division of Tulip Diagnostics (P) Ltd.

Product Presentation:

Cat No.	Product description	Pack Size
201020350500	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.
