

BRUCELLA AGAR BASE

Basal medium for selective isolation of *Brucella* spp.

TYPICAL FORMULA (g/l)

Peptone	10.0
Meat Extract	5.0
Glucose	10.0
Sodium Chloride	5.0
Agar	15.0

Final pH = 7.5 ± 0.2 at 25 °C.

DIRECTIONS

Suspend 45.0 g of powder in 1 liter of distilled or deionized water. Heat until completely dissolved. Sterilize in autoclave at 121 °C for 15 minutes. Cool to 45-50 °C. Aseptically add 5-10% of inactivated horse serum, 1-5% of sterile glucose and 2 vials of Brucella supplement (code 81003), reconstituted with 10 ml of a 1:1 solution of methanol and sterile distilled water and incubated at 36 ± 1 °C for 10-15 minutes. Mix well and distribute into Petri dishes.

BRUCELLA supplement

1 Vial contents (each vial is sufficient for 500 ml of medium):

Polymyxin B	2,5000 IU
Bacitracin	12,500 IU
Cycloheximide	50.0 mg
Nalidixic Acid	2.5 mg
Nystatin	50,000 IU
Vancomycin	10.0 mg

DESCRIPTION

BRUCELLA AGAR BASE is a basal medium for isolation of all biotypes of *Brucella*.

TECHNIQUE

Inoculate the medium spreading the specimen over its surface using a bent sterile glass rod and incubate at 36 ± 1 °C for 72-96 hours in 10-20% CO₂ atmosphere. *Brucella* colonies appear as 1-2 mm diameter convex colonies with round entire edges, and may be identified by slide agglutination.

QUALITY CONTROL

Dehydrated medium

Appearance: free-flowing, homogeneous.

Color: beige.

Prepared medium

Appearance: slightly opalescent.

Color: light amber.

Incubation conditions: 36 ± 1 °C for 24-72 hours at 5-10% CO₂.

Microorganism	ATCC	Growth
<i>Brucella abortus</i> □□	4315	good
<i>Staphylococcus aureus</i> □	25923	inhibited
<i>Escherichia coli</i> □□	25922	inhibited

PERFORMANCE AND LIMITATIONS

Colonies, examined in indirect sunlight, appear translucent, with a slightly amber tinge. OMS recommends the use of thionine and basic fuchsin resistance tests to differentiate *Brucella melitensis*, *Brucella abortus*, *Brucella suis*. Since the nutritional requirements of microorganisms are different, some strains may be encountered that fail to grow or grow poorly on this medium.



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STORAGE

The powder is very hygroscopic: store the powder at 10-30 °C, in a dry environment, in its original container tightly closed and use it before the expiry date on the label or until signs of deterioration or contamination are evident.
Store prepared plates at 2-8 °C.

REFERENCES

1. Moyer, N.P., and L.A. Holcomb (1995). Brucella, p. 549-555.
2. Vanderzant, C., and D.F. Splittstoesser (ed.) (1992). Compendium of methods for the microbiological examination of food, 3rd ed. American Public Health Association, Washington, D.C.
3. Alton, Jones (1968). La brucellose techniques de laboratoire. Geneve: OMS.

PRESENTATION

Product	REF	
BRUCELLA AGAR BASE (11.1 l)	610079	500 g
BRUCELLA AGAR BASE (2.2 l)	620079	100 g
BRUCELLA supplement	81003	10 vials

TABLE OF SYMBOLS

LOT Batch code	 Caution, consult accompanying documents	 Manufacturer	 Contains sufficient for <n> tests	IVD In Vitro Diagnostic Medical Device
REF Catalogue number	 Fragile, handle with care	 Use by	 Temperature limitation	 Keep away from heat source



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