

Brucella Agar

Medium used for the isolation and cultivation of Brucella spp.

*Equally use with MFDS (MB-B1079K) and Brucella Agar Base.

• CONTENTS (Liter)

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

• PROCEDURE

Suspend 43.1 G of powder in 950 mL or 900 mL of distilled or deionized water. Heat to boiling until completely dissolved. Sterilize by autoclave at 121°C for 15 minutes. Cool to 45 - 50°C in water bath. Aseptically add 5 - 10% of sterile Bovine Serum (MB-B1887, required heat inactivation at 56°C for 30 minutes). If necessary, add 2 vials of Brucella Selective supplement (MB-B1803). Mix well. Pour into petri dishes.

Brucella Selective supplement

1 vial contents (each vial is sufficient for 500 mL of medium)

Polymyxin B	2,500 IU
Bacitracin	12,500 IU
Cycloheximide	0.05 g
Nalidixic Acid	0.0025 g
Nystatin	50,000 IU
Vancomycin	0.01 g

• INTERPRETATION

Brucella Agar is a medium used for the isolation and cultivation of Brucella spp. Pancreatic digest of casein, peptic digest of animal tissue and yeast extract provide nitrogen, carbon, vitamins and minerals. Dextrose is an energy source. Sodium chloride maintains the osmotic balance. Sodium bisulfite and bovine serum are added to enhance the growth of Brucella spp. Agar is the solidifying agent. Brucella Selective supplement is used for the isolation of Brucella spp. from milk.

• TECHNIC

Inoculate the specimen using a sterile loop to the medium. Incubate at 35 ± 2°C for 48 - 72 hours up to 5 days under microaerobic condition. Refer appropriate references for recommended test procedure.

• QUALITY CONTROL FOR USE

Dehydrated medium

Appearance: free-flowing, homogeneous

Color: light beige

Prepared medium

Appearance: slightly opalescent

Color: light amber

Incubation conditions: 35 ± 2°C / 48 - 72 hours up to 5 days under microaerobic condition

Microorganism	ATCC	Growth w/o supplement	Growth w/ supplement
<i>Brucella abortus</i>	NCCP 10040	good	good
<i>Escherichia coli</i>	25922	good	inhibited
<i>Staphylococcus aureus</i>	25923	good	inhibited

• STORE

The powder is very hygroscopic. Store the powder at room temperature, in a dry environment, in its original container tightly closed and use it before the expiry date on the label. Store prepared medium 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.
4. Refer to the MFDS.

• PACKAGE

Cat. No : MB-B1079 Brucella Agar	500 G
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