Condalab

Reference: 6017 **Technical Data Sheet**

Product: **BRUCELLA SUPPLEMENT**

CE IVD

Specification

Selective supplement for the isolation of *Brucella spp.*

Presentation

	Packaging Details	Shelf Life	Storage
10 Freeze dried vials Vial with: 6 ± 2 ml	22±0.25 x 55±0.5 mm glass vials, tag labelled, White plastic cap - 10 vials per box.	49 months	2-8 ºC

Composition

Composition (g/vial):

Cycloheximide	0.0500
Nalidixic acid	0.0025
Bacitracin	12,500 IU
Vancomycin	0.0100
Polymixin B sulphate	2,500 IU
Nystatin	50,000 IU

Note: Each vial is sufficient to supplement 500 ml of Brucella Agar

Reconstitute the original freeze-dried vial by adding
1:1 solutiion, methanol:
Sterile Distilled Water.....5 ml

Description /Technique

Description:

Brucella Agar (Cat. 1012), being rich in nutrients and growth factors, is very suitable to grow and isolate fastidious microorganisms.
It is used to successfully isolate *Brucella* from diverse specimens contaminated with microflora, both saprophytes and commensals, in clinical samples as well as in foods. This medium is also used to produce clostridial toxins. It can also be utilized in the isolation of many anaerobes both of human and animal origin. Food samples can be inoculated directly on the plates of Brucella Agar, while clinical specimens are more convenient as suspensions or macerations in sterile saline solutions.
Meat peptone and Casein peptone provide nitrogen, vitamins, minerals and amino acids essential for growth. Yeast extract is a source of vitamins, particularly of the B-group. Sodium bisulfite is the reducing agent; Sodium chloride supplies essential electrolytes for transport and osmotic balance. Dextrose is the fermentable carbohydrate providing carbon and energy. The addition of blood provides extra growth factors for fastidious microorganisms. Bacteriological agar is the solidifying agent. The addition of the Brucella Supplement (Cat. 6017) enhances the medium's selectivity for the growth of *Brucella*.
Brucella species are level 3 pathogens and cause brucellosis, a zoonotic disease. It is usually transmitted through milk, dairy products, meat and direct contact with infected animals.
Note: To obtain an excellent medium for anaerobes, add 5 mg/ml of hemin and 10 µg/ml of vitamin K1 (fitomenadione) to the basal medium. Inoculate and incubate in anaerobic conditions

Technique:

Aseptically reconstitute 1 vial with 5 ml of 1:1 solution of methanol/sterile distilled water. Incubate at 37 ºC for 10-15 minutes. Mix until completely dissolved and aseptically add to 500 ml of Brucella Agar (Cat. 1012) or Columbia Agar Base (Cat. 1104), autoclaved, cooled to 50 ºC and, if desired, with both 5-10% inactivated horse serum and 1-5% sterile dextrose solution added. Mix well and distribute into sterile containers.

Instructions for use:

For clinical diagnosis, the sample type is blood and bone marrow.
- Inoculate on surface. Parallel striae with the handle or hyssop.
- Incubate at 35 ± 2 ºC in duplicate: one plate under normal conditions and the other under anaerobic conditions in a 5-10% CO2 atmosphere. - Observe after 24-72 hours.

Quality control

Physical/Chemical control

Color : White-yellowish pH: at 25ºC

Microbiological control

Reconstitute 1 vial as indicated in COMPOSITION; shake and dissolve completely

Add 1 vial to 500 ml of medium base. DO NOT HEAT once supplemented.

Distribute the complete medium, cooled to 50 ºC, into 90 mm plates

Aerobiosis. Incubation at 35 ± 2 ºC, reading after 48-72 hours

Microorganism	Growth
Stph. aureus ATCC® 25923, WDCM 00034	Inhibited
Escherichia coli ATCC® 25922, WDCM 00013	Inhibited

Sterility Control

Add 5 ml of the sample to:
100 ml TSB and 100 ml Thioglycollate.
Incubation 48 hours at 30-35 ºC and 48 hours at 20-25 ºC: NO GROWTH.

Bibliography

Moyer, N.P., and L.A. Holcomb (1995). Brucella, p. 549-555. In P.R. Murray, E.J. Baron, M.A. Pfaller, F.C. Tenover, and R.H. Yolken (ed.). Manual for clinical microbiology, 6th ed. American Society for Microbiology, Washington, D.C.

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