Legionella (B.C.Y.E.) Broth (without ACES and α-Ketoglutaric Acid)

Medium used for the cultivation and enumeration of Legionella spp.

• CONTENTS (Liter)

Charcoal Activated 2.0 g Yeast Extract 10.0 g

Final pH = 6.9 ± 0.1 at 25° C

PROCEDURE

Suspend 12.0 G of powder in 1 L 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 10 vials of Legionella (B.C.Y.E.) Growth supplement (MB-L1856). Mix well. Pour into tubes.

Legionella (B.C.Y.E.) Growth supplement

1 vial contents (each vial is sufficient for 1	00mL of medium)
L-Cysteine	0.04 g
Ferric Pyrophosphate	0.025 g
ACES	1.0 g
Potassium Hydroxide	0.2 g
α - Ketoglutarate	0.1 g

INTERPRETATION

Legionella (B.C.Y.E.) Broth (without ACES and α – Ketoglutaric Acid) is a medium used for the cultivation and enumeration of Legionella spp. Charcoal decomposes hydrogen peroxide and other toxic products. Yeast extract provide the nitrogen, minerals and vitamins. L-Cysteine and ferric pyrophosphate provide nutritional requirements of *Legionella* species. ACES gets a stable pH for optimal growth. α -Ketoglutarate is added to stimulate growth.

TECHNIC

Inoculate the specimen with stab using a sterile needle to the medium. Incubate at $35 \pm 2^{\circ}$ C for 3 - 4 days. Refer appropriate references for recommended test procedure.

QUALITY CONTROL FOR USE

Dehydrated medium

Appearance: free-flowing, homogeneous

Color: dark gray Prepared medium

Appearance: opaque with a precipitate

Color: black

Incubation conditions: 35 ± 2°C / 3 - 4 days

Microorganism	ATCC	Inoculum CFU	Growth
Legionella pneumophila	33152	50-100	good

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 or until signs of deterioration or contamination are evident. Store prepared medium at 2 - 8°C.

REFERENCES

- 1. Edelstein, P.H. M.A.C. (1996) J. Clin. Microbiol. 34: 185-187.
- 2. BSI Document Determination of Legionaellae in water and related materials. Method for their detection and enumeration. July 1989 DRAFT DOCUMENT. 89/53406.

PACKAGE

Cat. No : MB-L0928 Legionella (B.C.Y.E.) Broth (without ACES and α - Ketoglutaric Acid)	500 G
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