

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

Medium used for the isolation and cultivation of Legionella spp.

• CONTENTS (Liter)

Charcoal Activated	2.0 g
Yeast Extract	10.0 g
Agar	13.0 g
Final pH = 6.9 \pm 0.2 at 25°C	

• PROCEDURE

Suspend 25.0 G of powder in 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 10 vials of Legionella (B.C.Y.E.) Growth supplement (MB-L1856). Mix well. Pour into petri dishes.

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

1 vials contents (each vial is sufficient for 100 mL of medium)

L-Cysteine	0.04 g
Ferric Pyrophosphate	0.025 g
ACES	1.0 g
Potassium Hydroxide	0.28 g
α -Ketoglutarate	0.1 g

• INTERPRETATION

Legionella (B.C.Y.E.) Agar (without ACES and α -Ketoglutaric Acid) is a medium used for the isolation and cultivation of Legionella spp. Charcoal Activated neutralizes toxic products in the medium. Yeast extract provides the nitrogen, minerals and vitamins. Agar is the solidifying agent. L-Cysteine and ferric pyrophosphate provide nutritional requirements of Legionella species. ACES and potassium hydroxide get a stable pH for optimal growth. α -Ketoglutarate is added to stimulate growth.

• TECHNIC

Inoculate the specimen using a sterile loop to the medium. Incubate at 35 \pm 2°C for 3 - 4 days up to 7 days under microaerobic condition. 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 \pm 2°C / 3 - 4 days up to 7 days under microaerobic condition

Microorganism	ATCC	Inoculum CFU	Growth
<i>Legionella busanensis</i>	BAA-518	50-100	good
<i>Legionella pneumophila</i>	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. 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-L1125 Legionella (B.C.Y.E.) Agar (without ACES and α -Ketoglutaric Acid)	500 G
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• MICROBIAL CULTURE IMAGES



Legionella pneumophila ATCC 33152 (100 CFU)

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