

Bacteroides Bile Esculin Agar



Medium used for the isolation and cultivation of *Bacteroides fragilis*.

• CONTENTS (Liter)

Pancreatic Digest of Casein	15.0 g
Papaic Digest of Soybean Meal	5.0 g
Sodium Chloride	5.0 g
Oxgall	20.0 g
Esculin	1.0 g
Ferric Ammonium Citrate	0.5 g
Agar	15.0 g
Final pH = 7.0 ± 0.2 at 25°C	

• PROCEDURE

Suspend 61.5 G of powder in 1L 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 2 vials of Bacteroides Bile Esculin Agar supplement (MB-B3002) and 2vials of Gentamicin supplement (MB-G1833). Mix well. Pour into petri dishes.

Bacteroides Bile Esculin Agar supplement

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

Hemin	0.005 g
Vitamin K	0.005 g

Gentamicin supplement

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

Gentamicin	0.05 g
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• INTERPRETATION

Bacteroides Bile Esculin Agar is a medium used for the isolation and cultivation of *Bacteroides fragilis*. Pancreatic digest of casein, papaic digest of soybean meal, hemin and vitamin K provide the essential growth nutrients to anearobic bacteria. Sodium chloride maintains the osmotic balance. Oxgall and gentamicin inhibit most anaerobic gram-negative organisms except *Bacteroides faragilis*. Esculin produces esculetin and dextrose in this medium. The esculetin reacts with ferric ammonium citrate to form a brown-black colored complex that appears in this medium surrounding colonies of the *Bacteroides fragilis*. Agar is the solidifying agent.

• TECHNIC

Inoculate the plates with spreading the specimen on surface of medium using a sterile loop. Incubate at 35 ± 2°C for 48 - 72 hours under anaerobic condition. Refer appropriate references for recommended test procedure.

• QUALITY CONTROL FOR USE

Dehydrated medium

Appearance: free-flowing, homogeneous

Color: light beige

Prepared medium

Appearance: clear to slightly opalescent

Color: amber

Incubation conditions: 35 ± 2°C / 48 - 72 hours under anaerobic condition

Microorganism	ATCC	Inoculum CFU	Growth	Esculin Hydrolysis
<i>Bacteroides fragilis</i>	25285	50-100	good	+
<i>Escherichia coli</i>	25922	≥10 ³	inhibited	-
<i>Clostridium perfringens</i>	13124	≥10 ³	inhibited	-
<i>Proteus mirabilis</i>	25933	≥10 ³	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 or until signs of deterioration or contamination are evident. Store prepared medium at 2 - 8°C.

• REFERENCES

1. Murray P. R., Baron E. J., Tenover J. C., Tenover F. C., (Eds.), 8th Ed., 2003, Manual of Clinical Microbiology, ASM, Washington, D.C.
2. Livingston, Kominos and Yee, 1978, J. Clin. Microbiol., 7:448.
3. Shimada K., Sutler V.L. and Finegold S.M., 1970, Appl. Microbiol. 1:345138889
4. Finegold S.M. and Sutler V.L., 1971, J. Infect. Dis., 124:556.
5. MacFaddin J.F., 1985, Media for Isolation-Cultivation-Identification-Maintenance of Medical Bacteria, Vol. I, Williams and Wilkins, Baltimore.

• PACKAGE

Cat. No : MB-B0792 Bacteroides Bile Esculin Agar	500 G
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