

Fastidious Anaerobe Broth

Medium used for the cultivation and enumeration of anaerobic microorganisms.

• CONTENTS (Liter)

Peptone	23.0 g
Soluble Starch	1.0 g
Sodium Bicarbonate	0.4 g
Sodium Chloride	5.0 g
Glucose	1.0 g
Sodium Pyruvate	1.0 g
L-Arginine	1.0 g
L-Cysteine HCl	0.5 g
Sodium Pyrophosphate	0.25 g
Sodium Succinate	0.5 g
Hemin	0.01 g
Vitamin K	0.001 g
Final pH = 7.2 ± 0.2 at 25°C	

• PROCEDURE

Suspend 33.66 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. If necessary, aseptically add 5 - 10% of Sheep Blood Defibrinated (MB-S1876). Mix well. Pour into tubes.

• INTERPRETATION

Fastidious Anaerobe Broth is a medium used for the cultivation and enumeration of anaerobic microorganisms. Peptone provides nitrogen, carbon, vitamins and minerals. Soluble starch and sodium bicarbonate detoxify metabolites. Sodium chloride maintains the osmotic balance. Glucose and sodium pyruvate are the energy sources. L-arginine, sodium succinate, hemin and vitamin K serve as growth factors. L-Cysteine is the reducing agent. Sodium pyrophosphate acts as a buffering agent.

• TECHNIC

Inoculate the specimen using a sterile needle to the medium. 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 : slightly opalescent with slight precipitates

Color: light amber

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

Microorganism	ATCC	Inoculum CFU	Growth
<i>Bacteroides fragilis</i>	25285	50-100	good
<i>Clostridium perfringens</i>	13124	50-100	good
<i>Clostridium sporogenes</i>	11437	50-100	good
<i>Clostridium sporogenes</i>	19404	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. Gibbons RJ. and MacDonald JB. 1960. Haemin and vitamin K compounds as required factors for the cultivation of certain strains of *Bacteroides melaninogenicus*. *J. Bact.* 80:164-170.
2. Sperry JF. Wilkins TD. 1976. Arginine, a growth-limiting factor for *Eubacterium lentum*. *J. Bacteriol* 127:780-784.

• PACKAGE

Cat. No : MB-F2169 Fastidious Anaerobe Broth	500 G
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