

O.F. Basal Agar



Medium used for the identification and determination of Gram-negative bacteria based on oxidative / fermentative metabolism.

• CONTENTS (Liter)

Tryptone	2.0 g
Yeast Extract	1.0 g
Sodium Chloride	5.0 g
Dipotassium Phosphate	0.2 g
Bromothymol Blue	0.08 g
Agar	2.5 g
Final pH = 6.8 ± 0.2 at 25°C	

• PROCEDURE

Suspend 10.78 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 100 mL of 10% solution of D-glucose, lactose, sucrose, or other carbohydrate, sterilized by filtration. Mix well. Pour into tubes until a height of 5 cm.

• INTERPRETATION

O.F. Basal Agar is a medium used for the identification and determination of Gram-negative bacteria based on oxidative / fermentative metabolism. Tryptone, yeast extract provide nitrogen, carbon, amino acids, minerals and vitamins. Sodium chloride maintains the osmotic balance. Dipotassium phosphate is the buffering agent. Bromothymol Blue is a pH indicator. Agar is the solidifying agent.

• TECHNIC

Inoculate fresh cultured colonies using a sterile loop to the medium in duplicate. Mix well and overlay with 2 mL of sterile mineral oil to one of the tubes. Incubate at 35 ± 2°C for 24 - 48 hours up to 7 days. Acid shows yellow color, while alkaline shows green color.

• QUALITY CONTROL FOR USE

Dehydrated medium

Appearance: free-flowing, homogeneous

Color: greenish beige

Prepared medium

Appearance : slightly opalescent

Color: dark green or greenish-blue

Incubation conditions: 35 ± 2°C / 24 - 48 hours up to 7 days / loosen the caps

Microorganism	ATCC	Growth	Charateristics	
			w/ glucose (aerobic)	w/ glucose (overlaid with mineral oil)
<i>Escherichia coli</i>	25922	good	acid / gas	acid / gas
<i>Shigella flexneri</i>	12022	good	acid	acid
<i>Pseudomonas aeruginosa</i>	27853	good	acid	alkaline

• 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. COSTIN, I. D.: An outline for the biochemical identification of aerobic and facultatively anaerobic gram-negative rods of medical interest. - 5. Intern. Kongr. f. Chemotherapie Wien, B2/1; 73-76 (1967).
2. HUGH, R., a. LEIFSON, E. : The taxonomic significance of fermentative versus oxidative metabolism of carbohydrates by various gram-negative bacteria – J. Bact., 66; 24-26 (1953).
3. MOSSEL, D.A.A., et MARTIN, G.: Milieu simplifié permettant l'étude des divers modes d'action des bactéries sur les hydrates des carbone. - Ann. Inst. Pasteur de Lille, 12; 225-226 (1961).
4. WELCH, D.F., MUSZYNSKI, M.J., PAI, C.H., MARCON, M.J., HRIBAR, M.M., GILLIGAN, P.H., MATSEN, J.M., AHLIN, P.A., HOLMAN, B.C., a. CHARTRAND, S.A.: Selective and differential medium for recovery of *Pseudomonas cepacia* from the respiratory tracts of patients with cystic fibrosis. - J. Clin. Microbiol., 25; 1730-1734 (1987).

• PACKAGE

Cat. No : MB-O1304 O.F. Basal Agar	500 G
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