Moeller Basal Broth

Medium used for the identification and determination of organisms on the basis of amino acid decarboxylation.
*Equally use with MFDS (MB-M1389K).

• CONTENTS (Liter)

Peptone	5.0 g
Beef Extract	5.0 g
Dextrose	0.5 g
Bromocrseol Purple	0.01 g
Cresol Red	0.005 g
Pyridoxal Hydrochloride	0.005 g

Final pH = 6.0 ± 0.2 at 25°C

• PROCEDURE

Suspend 10.52 G of powder in 1 L of distilled or deionized water. Add 10 g of either L-arginine or L-lysine or L-ornithine. Heat to boiling until completely dissolved. Sterilize by autoclave at 121°C for 10 minutes. Cool to 45 - 50°C in water bath. Mix well. Pour into tubes.

• INTERPRETATION

Moeller Basal Broth is a medium used for the identification and determination of Gram-negative enteric bacilli. Peptone and beef extract provide nitrogen, carbon, vitamins and minerals. Dextrose is the carbohydrate. Bromocresol purple and cresol red are the pH indicators. Pyridoxal hydrochloride is an enzyme cofactor for the amino acid decarboxylase activity.

• TECHNIC

Inoculate fresh cultured colonies using a sterile loop to the medium. Mix well and overlay the tubes with 1 - 2 mL of sterile vaseline oil (MB-80278). Incubate at 35 ± 2°C for 18 - 24 hours up to 4 days. Observe the tubes daily for color change. 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
Color: light purplish yellow
Incubation conditions: 35 ± 2°C / 18 - 48 hours up to 4 days overlaying with sterile vaseline oil

Microorganism	ATCC	Growth	Reaction with Arginine
Enterococcus faecalis	29212	good	+ (purple)
Escherichia coli	25922	good	- (yellow)

Microorganism	ATCC	Growth	Reaction with Lysine
Salmonella typhimurium	14028	good	+ (Purple)
Citrobacter freundii	8090	good	- (Yellow)

Microorganism	ATCC	Growth	Reaction with Ornithine
Proteus mirabilis	25933	good	+ (Purple)
Proteus vulgaris	13315	good	- (Yellow)

• 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. Moeller. 1954. Acta. Pathol. Microbiol. Scand. 34:102.
2. Moeller. 1954. Acta. Pathol. Microbiol. Scand. 34:259.
3. Moeller. 1955. Acta. Pathol. Microbiol. Scand. 36:158.
4. MacFaddin. 1985. Media for isolation-cultivation-identification-maintenance of medical bacteria, vol. I. Williams & Wilkins, Baltimore, Md.
5. Forbes, Sahm and Weissfeld. 1998. Bailey & Scott's diagnostic microbiology, 10th ed. Mosby, Inc., St. Louis, Mo.
6. Farmer. 1999. In Murray, Baron, Pfaller, Tenover and Yolken (ed.), Manual of clinical microbiology, 7th ed. American Society for Microbiology, Washington, D.C.
7. Refer to the MFDS.

• PACKAGE

Cat. No : MB-M1389 Moeller Basal Broth	500 G