

MYP (Mannitol Egg Yolk Polymyxin) Agar



Medium used for the isolation and cultivation of *Bacillus cereus* from foods.

*Equally use with MFDS (MB-M1390K), QIA (MB-M1390Q) and Bacillus Cereus Agar (Mossel) (MB-B1114).

• CONTENTS (Liter)

Beef Extract	1.0 g
Peptone	10.0 g
Mannitol	10.0 g
Sodium Chloride	10.0 g
Phenol Red	0.025 g
Agar	15.0 g
Final pH = 7.2 ± 0.2 at 25°C	

• PROCEDURE

Suspend 46.03 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 50 ml of Egg Yolk Emulsion (MB-E1864) and 2 vials of Polymyxin B supplement (MB-P0816). Mix well. Pour into petri dishes.

Polymyxin B supplement

(each vial is sufficient for 500 mL of medium)

Polymyxin B 50,000 IU

• INTERPRETATION

MYP (Mannitol Egg Yolk Polymyxin) Agar is a medium used for the isolation and cultivation of *Bacillus cereus* from foods. Beef extract and peptone provide nitrogen, carbon and vitamin source. Mannitol fermentation can be detected with phenol red. Sodium chloride maintains osmotic balance. Egg yolk emulsion helps in differentiation of lecithinase producing colonies which are surrounded by a zone of white precipitate. Polymyxin B restricts the growth of Gram-negative bacteria such as *Escherichia coli* and *Pseudomonas aeruginosa*.

• TECHNIC

Inoculate the plates with spreading the specimen on surface of the medium using a sterile loop. Incubate at 30 ± 2°C for 18 - 48 hours. Refer appropriate references for recommended test procedure.

• QUALITY CONTROL FOR USE

Dehydrated medium

Appearance: free-flowing, homogeneous

Color: pink

Prepared medium

Appearance: slightly opalescent

Color: red-orange

Incubation conditions: 30 ± 2°C / 18 - 48 hours

Microorganism	ATCC	Inoculum CFU	Growth	Characteristics
<i>Bacillus cereus</i>	11778	50-100	good	bright pink colonies with precipitation
<i>Escherichia coli</i>	25922	≥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 are evident. Store prepared medium at 2-8°C.

• REFERENCES

1. Mossel, Koopman and Jongerius. 1967. Appl. Microbiol. 15:650.
2. Donovan. 1958. J. Appl. Bacteriol. 21:100.
3. Coliner. 1948. J. Bacteriol. 55:777.
4. Rhodehamel and Harmon. 1995. FDA bacteriological analytical manual, 8th ed. AOAC International, Gaithersburg, Md.
5. Refer to the MFDS and QIA.

• PACKAGE

Cat. No : MB-M1390 MYP (Mannitol Egg Yolk Polymyxin) Agar	500 G
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