Baird Parker Agar



Medium used for the isolation and cultivation of Staphylococcus aureus.

*Equally use with MFDS (MB-B1004K) and KFCC (MB-B1004C).

CONTENTS (Liter)

Tryptone	10.0 g
Beef Extract	5.0 g
Yeast Extract	1.0 g
Glycine	12.0 g
Sodium Pyruvate	10.0 g
Lithium Chloride	5.0 g
Agar	20.0 g
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Final pH = 7.2 ± 0.2 at 25° C

PROCEDURE

Suspend 63.0 G of powder in 950 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 Tellurite Emulsion (MB-E1863) for observed lecithinase reaction or add 10 vials of R.P.F. supplement (MB-R1857) for directly observed coagulase reaction to the medium. Mix well. Pour into petri dishes.

R.P.F. supplement

1 vial contents (each vial is sufficient for 100 mL of medium)

Bovine Fibrinogen0.5 gRabbit Plasma2.5 gTrypsin Inhibitor0.0025 gPotassium Tellurite0.0025 g

INTERPRETATION

Baird Parker Agar is a medium used for the isolation and cultivation of *Staphylococcus aureus*. Tryptone and beef extract are the carbon and nitrogen sources. Yeast extract provides vitamin B complex that stimulate bacterial growth. Glycine and sodium pyruvate stimulate the growth of Staphylococci. Lithium chloride is the selective agent. Agar is the solidifying agent. Egg yolk tellurite emulsion is source of lecithin that helps observe the lecithinase reaction of coagulase positive Staphylococci. Coagulase reaction is observed with opaque halo when use only R.P.F supplement to the medium.

TECHNIC

Inoculate the specimen using a sterile loop to the medium. Incubate at 35 \pm 2°C for 18 - 24 hours up to 48 hours. Refer appropriate references for recommended test procedure.

QUALITY CONTROL FOR USE

Dehydrated medium

Appearance: free-flowing, homogeneous

Color: light beige
Prepared medium
Appearance: opaque

Color: yellow

Incubation conditions: $35 \pm 2^{\circ}\text{C} / 18 - 24 \text{ hours up to } 48 \text{ hours}$

Microorganism	ATCC	Inoculum CFU	Growth	Characteristics	Lecithinase reaction	Coagulase reaction
Staphylococcus aureus	25923	50-100	good	black colonies	+	+
Proteus mirabilis	25933	50-100	partially inhibited	brown colonies	-	-
Bacillus subtilis	9466	≥10 ³	partially inhibited	brown colonies	-	-
Escherichia coli	25922	≥10 ³	partially 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. Store prepared medium at 2 - 8°C.

REFERENCES

- 1. Baird Parker, A.C.. (1962). An. J. Appl. Bacteriol. 25:12-19.
- 2. Baird Parker. A.C. (1969) Isolation methods for microbiologists. Shapthon,. & Gould ed. London: Academic Press.
- 3. ISO 6888-1:1999. Part 1: Technique using Baird-Parker agar medium.
- 4. Refer to the MFDS and KFCC.

PACKAGE

MICROBIAL CULTURE IMAGES



Staphylococcus aureus ATCC 25923 (100CFU)

Incubation conditions : 35 ± 2 °C 48 hours



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