STAPHYLOCOCCUS 110 AGAR

Selective medium for staphylococci isolation from clinical and non-clinical specimens.

TYPICAL FORMULA	(g/l)
Tryptone	10.0
Yeast Extract	2.5
Lactose	2.0
Gelatin	30.0
D-Mannitol	10.0
Sodium Chloride	75.0
Dipotassium Phosphate	5.0
Agar	15.0

Final pH = 7.0 ± 0.2 at 25 °C.

DIRECTIONS

Suspend 149.5 g of powder in 1 liter of distilled or deionized water. Heat to boiling until completely dissolved. Sterilize in autoclave at 121 °C for 15 minutes. Cool to 45-50 °C. Dispense in petri dishes.

DESCRIPTION

STAPHYLOCOCCUS 110 AGAR is a medium for isolation and differentiation of staphylococci based on mannitol fermentation, pigment formation and gelatinase activity.

TECHNIQUE

Blend 20 g of specimen with sterile 80 ml 0.2 M NaCl solution for 3 minutes at high speed. Prepare tenfold dilutions and place 0.1 ml of each dilution onto prepared Staphylococcus 110 Agar plates. Spread with a sterile bent glass rod the material to examine on the surface of the solidified medium. Incubate at 36 ± 1°C for 18-48 hours.
Growth of pathogenic staphylococci produces colonies of yellow-orange pigment. To test for gelatinase reaction, flood the plate with 5 ml of ammonium sulphate saturated solution and incubate at 36 ± 1 °C for 10 minutes. Observe for a zone of clearing around the colonies (positive reaction). A drop of bromocresol purple indicator is added to several areas from which pigmented colonies have been removed: any change in color of the indicator, compared with that of uninoculated medium, from purple to yellow, is indicative of mannitol fermentation.

QUALITY CONTROL

Dehydrated medium
Appearance: free-flowing, homogeneous.
Color: very light beige to beige.
Prepared medium
Appearance: slightly opalescent to opalescent.
Color: light amber.
Incubation conditions: 36 ± 1°C for 18-48 hours.

Microorganisms	ATCC	Growth	Pig	Gel	Man
Bacillus subtilis	6633	good	-	+	-
Staphylococcus aureus	25923	good	+	+	+
Staphylococcus epidermidis	12228	good	-	+	-

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PERFORMANCE AND LIMITATIONS

Enterococcus faecalis may grow on Staphylococcus 110 Agar as tiny colonies with mannitol fermentation. Differentiate these organisms from staphylococci with the Gram stain and catalase test. Suspected *Staphilococci* must be subcultured to Nutrient Broth or Blood Agar for coagulase test as the high salt content of Staphilococcus 110 Agar may interfere with results. Pigment production is not reliable criterion for differentiation of staphylococcal spp.

STORAGE

The powder is very hygroscopic: store the powder at 10-30 °C, 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 or contamination are evident. Store prepared plates at 2-8 °C.

REFERENCES

1. MacFadding, J.F. (1985). Media for isolation-cultivation-identificationmaintenance of medical bacteria, vol. 1, p. 722-726.

PRESENTATION

Product	REF	Σ
STAPHYLOCOCCI 110 AGAR (3.3 l)	611366	500 g
STAPHYLOCOCCI 110 AGAR (0.6 l)	621366	100 g

TABLE OF SYMBOLS

LOT Batch code	Caution, consult accompanying documents	Manufacturer	Contains sufficient for <n> tests	IVD *In Vitro* Diagnostic Medical Device
REF Catalogue number	Fragile, handle with care	Use by	Temperature limitation	Keep away from heat source

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