MRSA Screen Agar

Medium used for the isolation and identification of MRSA (Methicillin Resistant *Staphylococcus aureus*).

• CONTENTS (Liter)

Beef Extract	2.0 g
Acid Hydrolysate of Casein	17.5 g
Soluble Starch	1.5 g
Sodium Chloride	40.0 g
Agar	17.0 g

Final pH = 7.3 ± 0.2 at 25°C

• PROCEDURE

Suspend 78.0 G in 1 L 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 2 vials of MRSA Selective supplement (MB-M2546). Mix well. Pour into petri dishes.

MRSA Selective Supplement

1 vial contents (each vial is sufficient for 500mL of medium)

Oxacillin	0.003 g

• INTERPRETATION

MRSA Screen Agar is a medium used for the isolation and identification of MRSA (Methicillin Resistant *Staphylococcus aureus*). Beef extract and acid hydrolysate of casein provide nitrogen, carbon, amino acids and minerals. Soluble starch neutralizes toxic metabolic by-products. Sodium chloride maintains the osmotic balance. Agar is the solidifying agent. Oxacillin is used to inhibit MSSA (methicillin sensitive *Staphylococcus aureus*).

• TECHNIC

Inoculate the specimen using a sterile loop to the medium. Incubate at 30 - 35°C for 24 hours. Refer appropriate references for recommended test procedure.

• QUALITY CONTROL FOR USE

Dehydrated medium
Appearance: free-flowing, homogeneous
Color: light beige
Prepared medium
Appearance: clear to slightly opalescent
Color: light amber
Incubation conditions: 30 - 35°C / 24 hours

Microorganism	ATCC	Growth
Staphylococcus aureus	33591	good
Staphylococcus aureus	25923	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. 1. Murray P. R., Baron J. H., Pfaller M. A., Jorgensen J. H. and Yolken R. H., (Eds.), 2003, Manual of Clinica l Microbiology, 8th Ed., ASM, Washington, D.C.
2. Barrett F. F., McGehee R. F. Jr., and Finland M., 1968, Methicillin-resistant Staphylococcus aureus at Boston City Hospital, Bacteriologic and epidemiologic observations. N. Engl. J. Med. 279:444-448.
3. National Committee for Clinical Laboratory Standards. 1997. Methods for dilution antimicrobial susceptibility tests for bacteria that grow aerobically. 4thed. Approved standard M7-A4. National Committee for Clinical Laboratory Standards, Villanova, PA.
4. Florey H. W., Chain E., Heatley N. G., Jennings M. A., Sanders A .G., Abraham E. P., and Florey M. E., (Ed.), Antibiotics, Vol. II, Oxford University Press, London.

• PACKAGE

Cat. No : MB-M2212 MRSA Screen Agar	500 G