

MRSA (Oxacillin) MAST® SELECTATAB

MS29 Series

Intended Use

For use in the detection of methicillin-resistant
Staphylococcus aureus (MRSA).

FOR IN VITRO DIAGNOSTIC USE ONLY

Contents:

25 (small) or 10 (large) MAST® SELECTATAB.
See pack label.

Formulation

Material:	Concentration in medium:
Oxacillin	2 or 4 mg/L

Storage and shelf life

Store unopened at 2 to 8°C until the expiry date shown on the pack label. Once opened, store MAST® SELECTATAB in capped, original packaging at 2 to 8°C until the expiry date shown on the pack label.

Precautions

For *in vitro* diagnostic use only. Observe approved biohazard precautions and aseptic techniques. To be used only by adequately trained and qualified laboratory personnel. Sterilise all biohazard waste before disposal. Refer to Product Safety Data sheet.

Materials required but not provided

Standard microbiological supplies and equipment such as loops, MAST® culture media, swabs, applicator sticks, incinerators and incubators, etc., as well as serological and biochemical reagents, and additives such as blood.

Procedure

1. Label Petri dishes using self-adhesive labels provided.
2. Sterilise appropriate volume of MAST® Mannitol Salt Agar (DM160D), cool to 50 to 55°C and hold at this temperature.
3. Using sterile forceps add one MAST® SELECTATAB to the volume of medium specified on the pack label to give a concentration of 4mg/litre. Alternatively add to double the volume specified on the label to give a concentration of 2mg/L. Label the bottle. Allow to stand for several minutes at 50 to 55°C until the MAST® SELECTATAB has broken up.
4. After the MAST® SELECTATAB has broken up, swirl the bottle 3 to 4 times and invert it to complete dispersal. An alternative method is to first dissolve the MAST® SELECTATAB in 3 to 5 mL of recommended diluent and add this to the appropriate volume of medium.
5. Mix well, pour culture plates (15 to 20 mL per plate) and allow to set.

6. Prepared culture plates may be used immediately or stored in plastic bags at 2 to 8°C for up to one week before use.
7. Inoculate the organism onto screening plates containing Mannitol Salt Agar and oxacillin (MSA + OX) and growth control plates of Mannitol Salt Agar (MSA) only.
8. The medium is also suitable for Multipoint inoculation, direct culture of clinical specimens and for subculture from suitable enrichment broths such as nutrient broth with 7.5% NaCl.
9. Incubate plates for up to 48 hours at 37°C and examine carefully. Organisms failing to grow on the MSA control plate should be rechecked for identity or viability.

Interpretation of results

MRSAs show yellow growth on both the MSA + OX and MSA plates. MSSAs (methicillin-sensitive *Staph. aureus*) show no growth on the MSA + OX plates and yellow growth on the MSA control plate. Coagulase negative staphylococci will produce small red colonies on MSA plates whilst most other bacteria will be inhibited.

Quality control

Check for signs of deterioration. Quality control must be performed with at least one organism to demonstrate a positive reaction and at least one organism to demonstrate a negative reaction. Do not use the product if the reactions with the control organisms are incorrect. The list below illustrates a range of performance control strains which the end user can easily obtain.

Test Organisms	Result	
	MSA	MSA+OX
<i>Escherichia coli</i> ATCC® 25922	no growth	no growth
<i>Staphylococcus aureus</i> ATCC® 25923	yellow growth	no growth
<i>Staphylococcus aureus</i> ATCC® 33591 (MRSA)	yellow growth	yellow growth
<i>Staphylococcus epidermidis</i> ATCC® 14990	red growth	no growth

References

Bibliography available on request.