

MAST® ID Oxacillin Strips

STOX

Intended use

For the detection of oxacillin resistance.

FOR IN VITRO DIAGNOSTIC USE ONLY

Contents

50 strips (STOX)

Formulation*

OXACILLIN STRIPS are filter paper strips 70 to 75mm by 6mm, printed "OXACILLIN". Each strip is impregnated with 6.25µg oxacillin.

Storage and shelf life

Store at 2 to 8°C in the containers provided until the expiry date shown on the pack label. Allow the pack to equilibrate to room temperature before opening.

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

- Using a pure 18 to 24 hour culture of test organism, prepare a suspension equivalent to a McFarland 0.5 standard in sterile water.
- Using a sterile swab, inoculate the agar in one streak across a plate of suitable test medium e.g. MAST® DST Agar (DM215D). Approximately 5 streaks can be added in parallel lines. One agar plate can therefore be used to investigate 3 test strains alongside 1 control sensitive and 1 control resistant strain.
- Apply one Oxacillin Strip at a right angle across all the inoculum streaks.
- Incubate for 18 to 24 hours at 30°C. Alternatively, if salt agar is used (DST Agar with 5% sodium chloride), then incubation can be at 35 to 37°C.

Interpretation of results

Results must be based on the degree of inhibition in comparison with the control sensitive and resistant staphylococci. Each laboratory must validate their own control organisms and cut-off zone sizes. Staphylococci exhibiting resistance to oxacillin should be regarded as resistant to other penicillins, cephalosporins, carbapenems and combinations of β-lactam antibiotics and β-lactamase inhibitors.

Quality control

Check for signs of deterioration. Quality control must be performed with at least one organism to demonstrate a resistant reaction and at least one organism to demonstrate a sensitive 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 that the end user can easily obtain.

Test Organisms	Result
<i>Staphylococcus aureus</i> ATCC® 33591	Resistant
<i>Staphylococcus aureus</i> ATCC® 33592	Resistant
<i>Staphylococcus aureus</i> ATCC® 25923	Sensitive

Limitations

It is recommended that this test be used in conjunction with biochemical and/or serological tests on colonies from pure culture to confirm identification.

References

Bibliography available on request.