

## MAST® ID Intralactam Strips

### ETO/1

#### Intended use

A strip test for the rapid detection of  $\beta$ -lactamase.

FOR IN VITRO DIAGNOSTIC USE ONLY

#### Contents

25 strips (ETO/1)

#### Formulation\*

Filter paper strips 5.7cm by 0.6cm, which are printed to identify the test, positive control and negative control areas. The strips are impregnated with benzyl penicillin and bromocresol purple at appropriate concentrations.

#### Storage and shelf life

Store at 2 to 8°C in the containers provided until the expiry date shown on the pack label. Allow 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 sterile needle or forceps, place a Intralactam Strip onto a suitable surface e.g. a clean microscope slide or empty Petri dish.
- Aseptically add a small drop of sterile de-ionised or distilled water to each area of the strip. The paper should be moist but not saturated.
- Using a pure, fresh culture of the test organism, remove several colonies by using either a wooden applicator stick or a loop and rub onto the test area of the strip.
- Observe any colour change occurring within 10 minutes.

#### Interpretation of results

- Positive – Yellow colour development.  
 Negative – Purple (no colour change)

A positive result should be interpreted as resistance to penicillin or cephalosporin activity.

#### 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; these should be applied to the appropriate areas of the strip. 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
<i>Haemophilus influenzae</i> ATCC® 35056	Positive
<i>Neisseria gonorrhoeae</i> ATCC® 31426	Positive
<i>Staphylococcus aureus</i> ATCC® 11632	Positive
<i>Escherichia coli</i> ATCC® 25922	Negative

#### Limitations

It is recommended that biochemical and/or serological tests are performed on colonies from pure culture to confirm identification. It is advisable to touch several colonies to test rather than take from one because of the existence of occasional non  $\beta$ -lactamase producing colonies. Colonies should not be taken from media containing fermentable carbohydrates, since any acid they produce may give false positives. Detection of staphylococcal  $\beta$ -lactamase is enhanced by testing growth from a medium containing sub-inhibitory concentrations of a  $\beta$ -lactam antibiotic e.g. MAST® DST Agar (DM215D) containing  $\beta$ -Lactamase Inducer MAST® SELECTATAB (MS29). If testing a non-induced staphylococcal strain, the reading time of the test should be extended, in this case a wet box may be used to prevent the strip from drying out.

#### References

Bibliography available on request.