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**Mast  
Group**

## MAST® ID Intralactam Circle

### ETO2

#### Intended use

A test for the detection of  $\beta$ -lactamase production. For use on multipoint inoculated plates.

FOR IN VITRO DIAGNOSTIC USE ONLY

#### Contents

10 circles (ETO2)

#### Formulation\*

Filter paper circles, 85mm in diameter, designed to fit most standard 90mm Petri dishes. The circles 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 pure, fresh culture of the test organism, prepare a suspension equivalent in density to a McFarland 0.5 opacity standard.
- Using MAST® Multipoint instrumentation (e.g. the SCANURIDOT Multipoint Inoculator), inoculate an agar plate and incubate at 35 to 37°C for 18 to 24 hours.
- After incubation, using a sterile forceps, place one Intralactam Circle on to the surface of the cultured plate.
- Press the circle down gently and 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. A negative result is not necessarily indicative of sensitivity.

#### 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
<i>Haemophilus influenzae</i> ATCC® 35056	Positive
<i>Neisseria gonorrhoeae</i> ATCC® 31426	Positive
<i>Staphylococcus aureus</i> ATCC® 11632	Positive (induced)
<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.

The intensity of the colour reactions on the test circle may be enhanced by holding the circle over a solution of ammonia before placing the circle on the plate.

The media used must not contain 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 – MAST® DST Agar (DM215D) containing a  $\beta$ -Lactamase Inducer MAST® SELECTATAB (MS29).

#### References

Bibliography available on request.