

MAST® ID Oxidase Strips

ETO4

Intended use

A strip test for the rapid detection of cytochrome oxidase enzyme (Oxidase) in bacteria.

FOR IN VITRO DIAGNOSTIC USE ONLY

Contents

25 strips (ETO4)

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 N,N,N',N'-tetramethyl-1,4-phenylenediamine at an appropriate concentration.

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 Oxidase Strip onto a suitable surface e.g. a clean microscope slide or empty Petri dish.
- Using a pure, fresh culture of the test organism, remove several colonies by using a wooden applicator stick, DO NOT USE A NICHROME WIRE LOOP AS THIS WILL PRODUCE FALSELY POSITIVE REACTIONS, and rub onto the test area of the strip.
- Observe for the development of a colour change within 10 seconds.

Interpretation of results

- Positive result – Development of a deep purple to blue colour change within the times specified for each test method indicates oxidase production.
- Negative result – No purple to blue colour or colour change within the time specified.

Note: Microorganisms are considered oxidase positive when the colour change to dark purple within 5 to 10 seconds.

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>Pseudomonas aeruginosa</i> ATCC® 27853	Positive
<i>Neisseria gonorrhoeae</i> ATCC® 49226	Positive
<i>Staphylococcus aureus</i> ATCC® 9144	Negative
<i>Escherichia coli</i> ATCC® 25922	Negative

Limitations

It is recommended that further biochemical and/or serological tests are performed on colonies from pure culture to confirm identification.

Organisms, which have produced acid from carbohydrate fermentation e.g. from growth on MacConkey agar, should be subcultured to another medium before testing.

Colonies taken from media containing nitrates may produce unreliable results.

Media containing a high proportion of blood may yield false positive results.

References

Bibliography available on request.