

MASTDISCS® ID Lysostaphin Discs

D48

Intended use

For the differentiation of staphylococci and micrococci.

FOR IN VITRO DIAGNOSTIC USE ONLY

Contents

50 discs in a vial (D48).

Formulation

Material:	Content per disc:
Lysostaphin	20µg

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

1. Dispense 2ml of Phosphate Buffered Saline (PBS) pH 7.4 into a small test tube or bijou container.
2. Using a pure 18 to 24 hour culture of test organism, prepare a suspension equivalent to a McFarland 1.0 standard in the 2ml PBS.
3. Transfer 1ml of the bacterial suspension to a second test tube or bijou.
4. Add a Lysostaphin disc to one of the bacterial suspensions and shake vigorously (test suspension). The second suspension is used as a negative control.
5. Incubate both suspensions at 35 to 37°C for 2 hours in a waterbath or for 2½ hours at 35 to 37°C in an incubator. Do not disturb the suspension.
6. After incubation, compare the turbidity of the test bacterial suspension against that of the negative control suspension.

Interpretation of results

After incubation observe turbidity in both the test and control comparison tubes and record clearing or reduction in density of the test suspension.

A clearly defined complete clearing of the bacterial suspension or marked decrease in its turbidity compared with the negative control suspension indicates susceptibility to lysostaphin presumptively identifying the test organism as *Staphylococcus* spp.

An unchanged turbid suspension indicates resistance to lysostaphin presumptively identifying the test organism as *Micrococcus* spp.

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>Staphylococcus aureus</i> ATCC® 25923	Clear
<i>Staphylococcus epidermidis</i> ATCC® 12228	Clear
<i>Micrococcus luteus</i> ATCC® 533	Turbid

Limitations

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

Organisms to be tested must have been previously characterised as Gram positive, catalase positive cocci.

Certain *Staphylococcus* species are more susceptible to lysostaphin than others, which may make interpretation of this test sometimes difficult. It is therefore important to always use a negative control comparison.

References

Bibliography available on request.