



Mast Group Ltd.
Mast House, Derby Road, Bootle
Liverpool, Merseyside, L20 1EA
United Kingdom
Tel: + 44 (0) 151 472 1444
Fax: + 44 (0) 151 944 1332
email: sales@mast-group.com
Web: www.mast-group.com

Mast Diagnostica GmbH
Feldstrasse 20
DE-23858 Reinfeld
Germany
Tel: + 49 (0) 4533 2007 0
Fax: + 49 (0) 4533 2007 68
email: mast@mast-diagnostica.de
Web: www.mast-group.com

Mast Diagnostic
12 rue Jean-Jacques Mention
CS91106, 80011 Amiens, CEDEX 1
France
Tél: + 33 (0) 3 22 80 80 67
Fax: + 33 (0) 3 22 80 99 22
email: info@mast-diagnostic.fr
Web: www.mast-group.com



ADATAB®

Intended Use

For agar dilution breakpoint susceptibility testing.

FOR IN VITRO DIAGNOSTIC USE ONLY

Contents: 25 individual MAST ADATAB® tablets in a vial.

Formulation

Accurately prepared quantities of an antibiotic contained in a bacteriologically inert, non-interfering carrier substance. Each MAST ADATAB® is colour coded as follows:-
Blue – Low content suitable for susceptibility testing of organisms isolated from sites other than urine.
Red – High content for testing urine isolates.
White – Alternative contents

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. Return to the refrigerator promptly after use.

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. Suitable interpretive criteria from standardised reference methods.

Procedure

A. Preparing Breakpoint Plates

1. Label Petri dishes with the concentration to be prepared using the self adhesive labels provided.
2. Sterilise the appropriate volume of MAST® susceptibility test medium e.g. Mueller-Hinton Agar (DM170D) to be supplemented, cool to 50 to 55°C and hold at this temperature.
3. Using sterile forceps add one MAST ADATAB® for each 100mL volume of medium.
4. After the ADATAB® has broken up, swirl the bottle 3 to 4 times and invert it to complete dispersal.
5. After dissolving the ADATAB®, other supplements e.g. blood may be added to the medium as required.
6. Mix well, pour culture plates of appropriate thickness and allow to set.
7. Prepared culture plates may be used immediately or stored in plastic bags at 2 to 8°C for up to one week.

B. In Use

Plates prepared using MAST ADATAB® should be used according to an appropriate standardised agar dilution susceptibility test method, such as that published by CLSI.

1. Prepare a suspension of each organism equivalent in density to a 0.5 McFarland standard. Dilute as necessary in order to obtain an inoculum of 10⁷ CFU per 5 to 8 mm inoculum spot. This will be dependent on the replicator pins used.
2. Inoculate the surface of a well dried antibiotic free control plate using a replicating device, e.g. the MASTURI® DOT SCANURIDOT Multipoint Inoculator, to deliver each inoculum onto the agar surface.
3. Inoculate the set of antibiotic containing breakpoint test plates followed by a second antibiotic free control plate.
4. Allow the inoculum drops to dry before disturbing and incubate plates aerobically for 16 to 20 hours at 35±2°C (or alternative incubation conditions according to the methodology followed).

Interpretation of results

Growth on both the control antibiotic free plates but not on a test plate containing an antibiotic breakpoint concentration indicates susceptibility at that concentration. Growth on control and test plates indicates resistance at that concentration. Classify test isolates as Susceptible (S) or Resistant (R) by referring to appropriate antimicrobial susceptibility interpretative criteria.

Quality control

Check for signs of deterioration. Quality control must be performed with at least one organism to demonstrate a correct susceptibility pattern. 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	
<i>Escherichia coli</i> ATCC® 25922	Correct susceptibility pattern*
<i>Pseudomonas aeruginosa</i> ATCC® 27853	Correct susceptibility pattern*
<i>Staphylococcus aureus</i> ATCC® 29213	Correct susceptibility pattern*

*See appropriate quality control table

Limitations

Any deviation from the prescribed method may produce incorrect results.

It is strongly recommended that the latest published version of the method used is consulted for complete details of test procedures and interpretive criteria.

Certain antibiotics are unstable in poured plates and may not retain their potency over one week. Certain naturally coloured antibiotics cannot be colour coded.

References

Bibliography available on request.