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

MAST®STAPH

RST 101

Intended use
A rapid slide agglutination test for the identification of *Staphylococci* that produce clumping factor and/or protein A.

FOR IN VITRO DIAGNOSTIC USE ONLY

Contents
MAST®STAPH contains the following components:
1. Latex Reagent, ready to use. 2 x 3ml. Latex particles coated with human fibrinogen and IgG in phosphate buffered saline, pH 6.8. Contains less than 0.1% sodium azide as preservative.
2. 20 disposable 6-place test cards.
3. 120 single use disposable Mixing Sticks.
4. Instruction leaflet.

Stability and storage
Store unopened at 2 to 8°C until the expiry date shown on the pack label. Once opened, MAST®STAPH should be stored at 2 to 8°C and may be used until the expiry date given on the label. **Do not freeze latex reagents.**

Warnings and 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. Sodium azide preservative may be toxic if ingested and may react with lead and copper plumbing to form highly explosive salts. Always dispose of by flushing to drain with plenty of water. Refer to Product Safety Data sheet.

Materials required but not provided
Standard microbiological supplies and equipment such as loops.

Procedure
1. Allow the MAST®STAPH Latex Reagent to equilibrate to room temperature before use.
2. Shake well and then add 1 drop of MAST®STAPH Latex Reagent into a circle on the MAST®STAPH Test Card.
3. Using a clean mixing stick, pick up 2 to 4 average size colonies from a fresh overnight culture plate and emulsify the colonies in the latex, mixing thoroughly and spreading over half the area of the circle. Discard the stick into disinfectant.
4. Rotate and rock the card slowly and read within 1 minute.
5. Record result and dispose of the test card safely.

Interpretation of results
A positive result is indicated by visible aggregation of the latex particles with a clear background. This will occur within seconds of mixing.
A negative reaction is indicated by a milky appearance without any visible aggregation of the latex particles. Faint traces of granularity or string-like appearance without clearing of the background may be detected in negative patterns depending on the visual acuity of the operator.
For the specific detection of Methicillin Resistant *Staphylococcus aureus* (MRSA), the MAST®ALEX MRSA test kit (RST501) is recommended.

Limitations of use
Only freshly grown overnight cultures of organisms should be used for testing directly from the plate. If there is insufficient growth the organism should be sub-cultured onto MAST® Blood Agar Base (DM100D) or MAST® Nutrient Agar (DM179D) and incubated overnight at 37°C. Organisms grown on high salt medium such as Mannitol Salt Agar may show signs of stringiness when mixed with the latex reagent. Sub culturing onto MAST® Blood Agar Base (DM100D) or MAST® Nutrient Agar (DM179D) will avoid this problem.
Some species of staphylococci other than *S. aureus* (notably S. *intermedius* and *S. hyicus*) may give positive results in conventional coagulase test and may also agglutinate latex reagents. Rare species such as *S. lugdunensis* and *S. schleiferi* have been reported as clumping factor positive. Novobiocin resistant strains such as *S. xylosis* may also give false positive results using latex based tests. Several species such as *Escherichia coli* and *Candida albicans* are capable of non-specifically agglutinating latex particles. Organisms that possess immunoglobulin binding factors may also agglutinate the sensitised latex.

Quality control
Check for signs of deterioration. Quality control must be performed with at least one organism to demonstrate expected performance. Do not use the product if the result with the control organism is incorrect. The list below illustrates a range of performance control strains which the end user can easily obtain.

Test Organisms	Result
Staphylococcus aureus ATCC® 25923	Positive in 20 seconds
Normal saline solution	Negative

References
Bibliography available on request.

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