STAPHYLOCOCCUS LATEX TEST KIT

Catalogue No
Product description
STA/012
100 Test kit
STA/020
300 Test kit

INTENDED USE
The Plasmatec Staphylococcus Latex Test kit is intended for the identification of isolated staphylococci colonies grown as pure cultures on plates that produce clumping factor and/or protein A.

Health and Safety warnings:
For professional use only

STORAGE AND SHELF LIFE

COMPOSITION
Kit contents:
Staphylococcus Test Latex reagent 2.5 ml
Staphylococcus Control latex 2.5 ml
Disposable Test Cards, Mixing Sticks and pack insert.

METHOD

1. Shake the test latex reagent bottle well to expel any air in the dropper tube. Place one drop of reagent in the centre of a 3cm circle on a disposable slide.

2. Using a sterile loop, pick off 2-4 colonies from a fresh overnight culture plate of the organism to be investigated, and emulsify in the drop of reagent on the slide.

3. Rotate the slide gently and observe for agglutination. Do not rotate for more than 1 minute. View only using normal laboratory lighting. Do not employ the use of magnifiers of bench lights.

RESULTS

A POSITIVE RESULT is indicated by the visible agglutination of the latex particles. This will normally occur within a few seconds of mixing.

A NEGATIVE RESULT is indicated by a milky appearance without any visible agglutination of the latex particles.

However faint traces of granularity may be detected in negative patterns, depending on the visual acuity of the operator.

INTERPRETATION OF RESULTS

A positive result is indicated by the visible aggregation of the latex particles. This will normally occur within a few seconds of mixing depending on the strength of the antigen extract. A negative result is indicated by a milky appearance without any visible aggregation of the latex particles.

Agglutination of the latex reagent without agglutination of the control reagent indicates the presence of either clumping factor or protein A.

If the control reagent also shows agglutination then other biochemical tests will be necessary.

PERFORMANCE CHARACTERISTICS AND LIMITATIONS OF THE METHOD

A blind trial was carried out by the Leicester PHLS. Two hundred and fourteen reference strains were tested. These represented a number of commonly isolated species together with certain rare species.

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Sensitivity 15/15 = 100%
Specificity 134/135 = 99.3%

Some species of staphylococcus other than S. aureus (notably S. intermedius and S. hyicus) may give positive results in conventional coagulase tests and may also agglutinate latex reagents. Rare species such as S. lugduniensis and S. schleiferi have been reported as clumping factor positive. Novobiocin resistant strains may also give false positive results using latex based tests. Several species such as E.coli and C.albicans are capable of non-specifically agglutinating latex particles.

Organisms that possess immunoglobulin binding factors may also agglutinate the test reagent latex.

INTERNAL QUALITY CONTROL

A control latex is provided and should be used to verify that organism under test does not agglutinate latex particles non-specifically. Periodically check the following:

1. The test reagent agglutinates with a known S.aureus strain
2. The test and control reagents do not auto agglutinate in normal saline solution.

REFERENCES


STAPHYLOCOCCUS

SPECIES

S. aureus
S. lugduniensis
S. schleiferi
S. intermedius
S. hyicus
S. intermedius
S. hyicus
S. lugduniensis
S. schleiferi

SPECIFICITY

134/135 = 99.3%