

Product Information

08986 Staphylo Monotec test kit

Staphylo Monotec test kit is a new rapid agglutination test for differentiation between *Staphylococcus aureus* and other *Staphylococcus*. This method has been evaluated for clinical specimens and food material. With this kit coagulase and protein A on *S. aureus* can be detected in one step.

Kit content	Qty.
Test reagent (88786; vial with red cap), 5 ml <i>The reagent consists of monodisperse particles coated with IgG and fibrinogen.</i>	1
Control reagent (69187; vial with white cap), 5 ml <i>The control reagent consists of monodisperse particles coated with bovine serum albumin.</i>	1
Analysis cards (contains reagent for more than 100 tests)	40

Directions:

1. Take the reagent out of the refrigerator and let them reach room temperature.
2. Agitate the reagent vials vigorously for 10 sec. preferably by vortexing.
NOTE: The solution must be homogeneous before use.
3. Place one drop of the reagent on the analysis card for each reaction.
4. Transfer one or more of the colonies to be tested to the drop of analysis reagent and mix well for 20 sec.
5. Tilt the analysis card carefully once and look for agglutination. A positive reaction will give a clearly visible agglutination. Immediately read the result after mixing, to avoid false positives.

NOTE: When the agglutination is weak or ambiguous, repeat step 3 to 5 with the control reagent.

Interpretation of the result:

1. The isolate is *S. aureus* if agglutination occurs in the test reagent, but not in the control reagent.
2. The isolate is not *S. aureus* if the test reagent does not agglutinate or if both the test and negative control reagent agglutinate.

Principle and Interpretation:

Staphylo Monotec test reagent consists of monodisperse particles coated with fibrinogen and immunoglobulin G (IgG). On average 97% of human *S. aureus* isolates are coagulase positive. In addition, and independently of the coagulase property, more than 95% of all clinical *S. aureus* isolates have protein A in the cell wall. Because fibrinogen binds to the cell-associated enzyme coagulase, and because the Fc part of the IgG binds to protein A, a rapid agglutination occurs, when *S. aureus* is mixed with the Staphylo Monotec test reagent.

The two molecules, fibrinogen and IgG, on the same monodisperse particle give the Staphylo Monotec test kit reagent an extremely high specificity. In addition, the double reaction obtained with Staphylo Monotec enhances its sensitivity.

To obtain highest possible safety of the analysis the Staphylo Monotec test kit also contains a control reagent for use when the agglutination is ambiguous. The control reagent consists of monodisperse particles coated with bovine serum albumin.

When one or several colonies of *S. aureus* is mixed with a drop of the test reagent on the analysis card, a strong, rapid and clearly visible agglutination occurs.

Limitations:

Some strains of the new species, *S. lugdunensis* and *S. schleiferi*, have been reported to react with the fibrinogen affinity factor detecting clumping factor, and may therefore give positive results on latex agglutination tests.

Storage:

Store Staphylo Monotec test kit in a refrigerator between +2 and +8 °C.

Shelf life is stated on the package.