



ATLAS BRUCELLA TEST (Rose Bengal)

A rapid agglutination slide test for the detection of Brucella specific agglutinins

For *In-Vitro* Diagnostic Use Only
Store at 2° to 8°C

INTENDED USE

Brucella antigens are bacterial suspensions for use in slide agglutination tests to detect the presence of bacterial agglutinins associated with bacterial infection or previous exposure to a related organism. This slide test is recommended as a screening procedure only to establish the presence or absence of homologous antibody.

PRINCIPLE OF THE TEST

In the course of human infection with any pathogenic microbiological agent, a variety of antibodies are formed. Among these antibodies are the agglutinins. An agglutinin when combined with homologous antigen (agglutinogen) under the properly controlled conditions is capable of causing agglutination. A suspension of Brucella possessing active antigen will agglutinate when exposed to homologous Brucella antibody. This agglutination forms clumps of bacteria which becomes macroscopically visible.

The Rose Bengal stained Brucella antigen is used for the early detection of Brucella agglutinins (Brucella Abortus, Melitensis and Suis).

REAGENTS

- 1- Rose Bengal Brucella Antigen (0.5% phenol)
- 2- Positive Control (0.01% sodium azide)
- 3- Negative Control (0.01% sodium azide)

WARNING

Brucella Antigens and control antisera are to be used for In Vitro Diagnostic Use Only.

STORAGE

Brucella antigen and control antisera must be stored at 2-8°C when not in use.

SPECIMEN COLLECTION & PREPARATION

1. Collect 5ml whole blood samples aseptically from the patient.
2. Allow blood to clot and remove serum as soon as possible to prevent excess haemolysis.
3. Store serum at 2-8°C until testing can be performed.

MATERIALS PROVIDED

1. Brucella Antigen, Rose Bengal Stained.
2. Positive Control.
3. Negative Control.
4. White Glass slide.
5. Stirring Sticks.

MATERIALS REQUIRED BUT NOT PROVIDED

1. Pipettes for dispensing 40µl serum.
2. Timer.

PROCEDURE

- 1- Allow reagents and serum samples to reach room temperature for testing.
- 2- Shake the antigen bottle gently to insure a uniform suspension.
- 3- Place 40ul sample serum onto the selected ring of the slide.
- 4- Place one drop of the Rose Bengal antigen onto serum sample.
- 5- Mix serum sample with Rose Bengal antigen using Stirring stick.
- 6- Repeat these steps using the positive and negative controls instead of serum sample.
- 7- Gently rock the slide for 2 minutes (automatic rotator can also be used).
- 8- Observe for agglutination after 2 minutes from beginning of shaking (this is the optimum time limit).

RESULTS

Negative: No agglutination

Positive: (Presence of Specific Antibodies):
Agglutination

INTERPRETATION OF RESULTS

This test is a screening test only for the detection of Brucella agglutinins. If result is positive it must be confirmed by other serological tests for Brucellosis.

LIMITATIONS OF THE PROCEDURE

Detectable agglutinins are not always produced in bacterial infection. In some instances, non-specific agglutinins may appear which will react with Brucella antigens. For example, serum from some narcotic addicts has been reported to contain significant agglutinins to the febrile antigens. Cross-reactions may occur in certain diseases. For instance, Tuleremia infections may produce agglutinins capable of reacting with Brucella antigens. Vaccinations may produce agglutinins capable of reacting with the febrile antigens.

REFERENCES

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