BALLYA

Brucellosis Rapid Test Kit

(Milk Based)

Intended Use

Brucellosis rapid test Kit is a qualitative immuno-chromatography assay for detection of antibodies against smooth *Brucella.* It is suitable for brucellosis diagnosis in a wide range of mammalian animals, including bovine, small ruminant, swine, deer and camel, etc. Properly collected milk as sample for **Brucellosis** Screening Assay.

General Information

Brucellosis is one of the most important zoonosis found throughout the world, causing great losses in public health and farming economy. It is often caused by three smooth type *Brucella* species with different host preference: *B. abortus* (for cattle), *B. melitensis* (for sheep and goat) and *B. suis* (for pig)*.* Humans are usually infected via contact with or ingestion of contaminated animal products (eg. milk, cheese or meat). The main symptoms in infected human beings include undulant fever, testitis and arthritis. Infection in pregnant animals normally leads to abortion. Brucellosis eradication programs are now being conducted in many countries, mainly based on mass serological screening of animals and subsequent removal of the infected individuals from the herds. Thus, fast and accurate detection tests for brucellosis are very important in controlling the spread of this disease in animal and human populations.

Description and Principle

Brucellosis Rapid Test Kit is based on the principle of colloidal gold immuno-chromatography to detect antibodies against *Brucella* in milk samples. The antigen immobilized on Test line of nitrocellulose membrane comprises of lipopolysaccharide (LPS) purified from smooth *Brucella* strains (*B. abortus* and *B. melitensis*). When milk sample is added to the sample well, the IgG molecules present in the sample will specifically bind to gold labeled r-SPG and migrate along the nitrocellulose membrane. The IgG and r-SPG complex will subsequently bind to the LPS antigen fixed on the T line and quickly develop to a visible color. If there is no brucellosis antibody present in the samples, no coloring on T line will occur.

Reagents & Materials Provided

1. Rapid test (25 cassettes), each is packed in foil pouch.
2. Extraction buffer (contained in 5 mL dropper bottle).
3. Instruction.

Storage Condition

Store the test kit at 4-25℃, avoiding direct sunlight.

Sample Preparation

Milk: Take 1ml of fresh milk, place into a clean and dry 1.5ml EP tube. Milk required fresh, no impurities and pollution. Sample can be stored at at 2- 8℃ for weeks and -20℃ for long term storage.


supernatant of milk
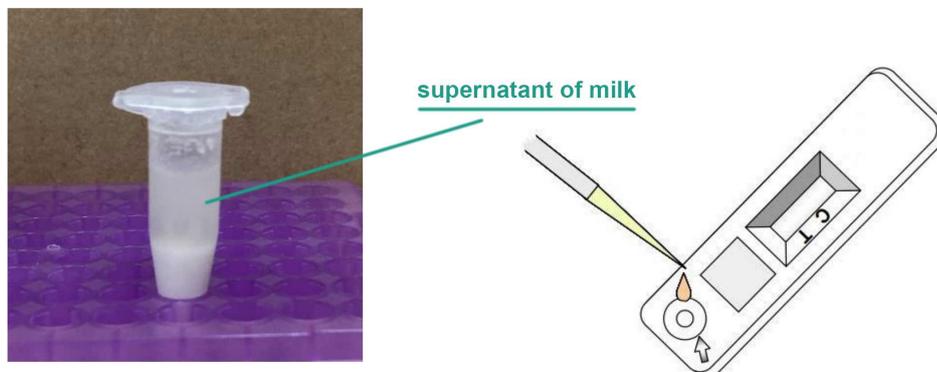
Test Procedure

1. Prior to test, leave the samples at room temperature for appropriate time to come to 18-25℃.
2. Remove Rapid Test Kit from the foil pouch.
3. Add 3-4 drops of buffer to EP tube (fresh milk), shake tube 2-3 times, make sure buffer mix with milk completely. Wait for 10 minutes to extract **supernatant liquid** from milk.
4. Take 3-4 drops of supernatant liquid and add to **SAMPLE well** on cassette.
5. Wait for 20 minutes and interpret results.

Interpretation of Result

1. Negative: visible line is only shown at control position (C), Brucellosis Ab is not present in the sample.
2. Positive: visible lines are shown at both control (C) and test positions (T), Brucellosis Ab is present in the sample.
3. Invalid: the C line does not show up, the sample need to be tested again with a new Test Kit.
4. Results are considered invalid when coloring happens only after 20 minutes.

Positive   **Negative**

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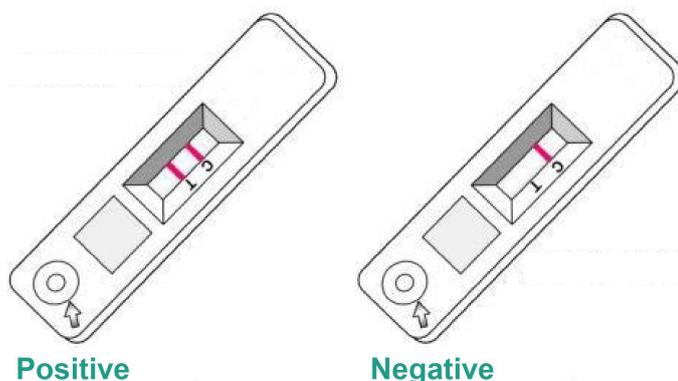
Precaution & Warning

1. Read the usage instruction carefully prior to use.

2. Bring all components at room temperature (18-25℃) before test.

3. The sample is required to be fresh and clear, avoiding the use of contaminated, severely hemolytic, abnormally viscous samples, or samples containing large amount of lipids.

4. Do not mix components from different kits.

5. Avoid any contamination in the reagents of the kit.

6. Do not use components outside of expiration dates and do not mix components from different lots.

7. There should be no eating, drinking, or smoking when samples are being handled.