



Brucella Ab Test Kit

Brucella Ab Test Kit

AI21



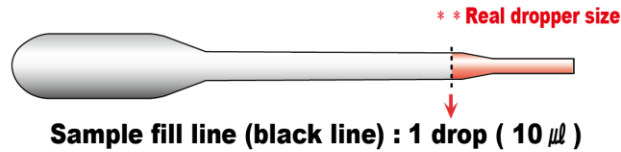
#B-305 Samsung Techno Valley, 140, Tongil-ro,
Deogyang-gu, Goyang-si, Gyeonggi-do, 10594, Korea
Tel. +82-2-2219-3459 Fax. +82-2-2219-3457
Email. Leonardo@vetall.com

Brucella Ab Test Kit

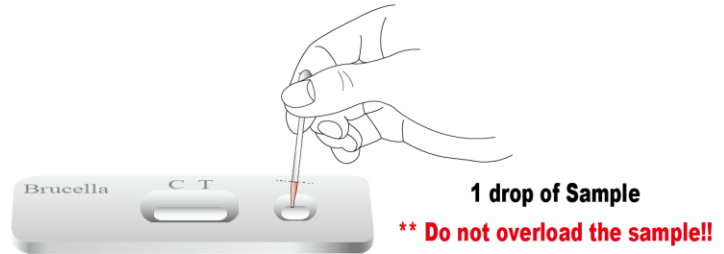
Brucella Ab Test Kit

Catalog number	AI21
Summary	Detection of specific antibodies of Brucella within 10 minutes
Principle	One-step immunochromatographic assay
Detection Targets	Brucella antibodies
Sample	Canine, bovine and Ovis Whole Blood, Plasma or Serum
Reading time	5 ~ 10 minutes
Sensitivity	91.3 % vs. IFA
Specificity	100.0 % vs. IFA
Limit of Detection	IFA Titer 1/16
Quantity	1 box (kit) = 10 devices (Individual packing)
Contents	Test kit, Tubes, Disposable droppers
Storage	Room Temperature (at 2 ~ 30°C)
Expiration	24 months after manufacturing
Caution	Use within 10 minutes after opening Use appropriate amount of sample (0.01 ml of a dropper) Use after 15~30 minutes at RT if they are stored under cold circumstances Consider the test results as invalid after 10 minutes

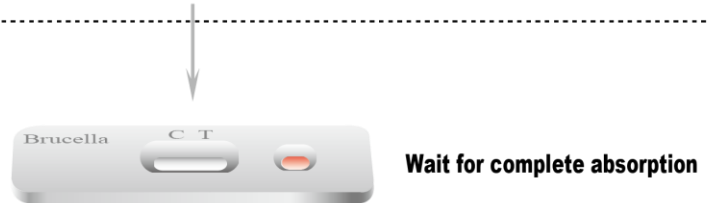
Instruction for Brucella Ab test



1
Sampling
& loading



2
Absorption



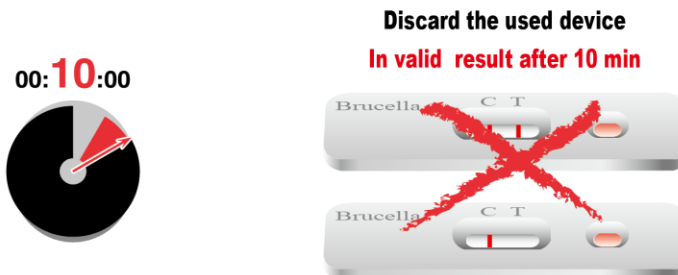
3
Buffer addition



4
Reading



5
Discard



Brucella spp.

Information

The genus *Brucella* is a member of family Brucellaceae and includes ten species which are small, non-motile, non-sporing, aerobic, gram-negative intracellular coccobacilli. They are catalase, oxidase and urea positive bacteria. Members of the genus can grow on enriched media like blood agar or chocolate agar. Brucellosis is a well-known zoonosis, present in all the continents, but with greatly varying prevalence and incidence, in the animal and human populations. *Brucella*, as facultative intracellular parasites, colonize many species of social animals in a chronic, possibly permanent way, perhaps for their whole lifetime.

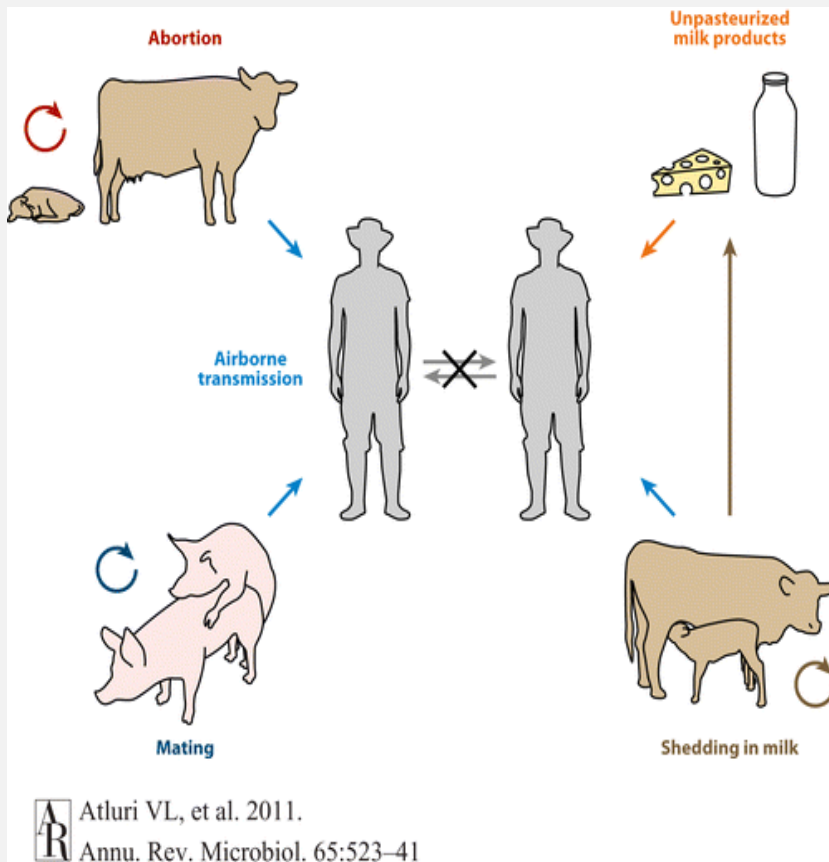


Brucella colony appearance

Brucella spp.

Transmission

Brucella species are usually transmitted between animals by contact with the placenta, fetus, fetal fluids and vaginal discharges of an infected animal. Most or all Brucella species are also found in semen. Male can shed these organisms for long periods or lifelong. Some Brucella species have also been detected in other secretions and excretions including urine, feces, hygroma fluid, saliva, milk and nasal and ocular secretions



Ecology of zoonotic Brucella infections

Brucella spp.

Symptoms

◆ In cows

There is no effective way to detect infected animals by their appearance. The most obvious signs in pregnant animals are abortion or birth of weak calves. Milk production may be reduced from changes in the normal lactation period caused by abortions and delayed conceptions. Other signs of brucellosis include an apparent lowering of fertility with poor conception rates, retained afterbirths with resulting uterine infections, and (occasionally) enlarged, arthritic joints.

◆ In dogs

In dogs, the Brucellosis bacteria normally settle down in the genitals and the lymphatic system, but it is possible for it to spread to the kidneys, eyes and the intervertebral disc as well. When Brucellosis infects the intervertebral disc, the result is discospondylitis. In dogs, symptoms from the reproductive organs are common. Male dogs can for instance develop scrotal and testicular inflammations, while female dogs can have miscarriages. Fever is uncommon, but the pain associated with Brucellosis can make the dog weak. If the disease spreads to kidneys, eyes or the intervertebral disc symptoms can begin to show from these organs.

◆ In pigs

The time between infection and the appearance of clinical signs of disease can range from about 1 week to 2 months. Signs that a herd has become infected are mainly those of reproductive failure – abortions, returns-to-service after mating and the birth of weak or stillborn piglets. Some sows may develop an infection of the uterus and show a vaginal discharge. Infected boars may develop swollen, inflamed testicles. Both sexes may become lame with swollen joints and/or develop signs of incoordination and hind leg paralysis.

Brucella spp.

Diagnosis

1. Isolation and identification of agent

Brucella species can be recovered from numerous tissue and secretions, particularly fetal membranes, vaginal secretions, milk(or udder secretions), semen, arthritis of hygroma fluids, and the stomach content, spleen and lung from aborted fetuses. Most Brucella species form colonies within a few days on selective media. When the plates are viewed in daylight through a transparent medium, these colonies are translucent and a pale honey color. When viewed from above, colonies appear convex and pearly white. Later colonies become larger and slightly darker.

2. Nucleic acid Method

PCR is a convenient tool for the diagnosis of brucellosis. Numerous PCR-based assays have been developed for the identification of Brucella to improve diagnostic capabilities. A genus-specific PCR assay is adequate to the simple identification of Brucella.

3. Serological diagnosis

There are many serological tests. Serological tests commonly used to test individual cattle or herds include the buffered Brucella antigen test, complement fixation, indirect or competitive enzyme-linked immunosorbent assays(ELISA) and fluorescence assay.