Version 10-04/24

User's Manual

Salmonella abortusovis ELISA Kit

REF **DEIA-WZ1001S**

Σ **96T**

RUO

This product is for research use only and is not intended for diagnostic use.

For illustrative purposes only. To perform the assay the instructions for use provided with the kit have to be used.

Creative Diagnostics

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PRODUCT INFORMATION

Intended Use

The Salmonella abortusovis test is an Enzyme-linked immunosorbent assay (ELISA) intended for the detection of IgG anti-Salmonella abortusovis in sheep serum and plasma samples. The test is designed to be used for the diagnosis of abortive salmonellosis infection and evaluation of antibody response to vaccination.

General Description

Salmonella enterica spp. enterica serovar abortusovis (Salmonella abortusovis) is a Salmonella serovar host-adapted to sheep, which causes infections that are mainly characterized by abortion as a main symptom. The disease develops in the last weeks of pregnancy, and the pathogenic mechanisms involved have not yet been understood. In the areas endemic for the microorganism, abortion may

occur in up to 50% of the ewes in a flock, usually during the first pregnancy. This high incidence of salmonellosis represents a major threat to the flocks and may result in important economic losses in regions that depend on shepherding.

S. abortusovis is reportable to the World Organization for Animal Health (OIE), but outbreaks are uncommonly described outside a few regions, such as southern Europe and Western Asia. Diagnosis is made by culture of placenta, fetus, or uterine discharge. Isolation of aborting ewes and destruction of contaminated bedding and of all products of abortion reduce contamination. Prevention is

mainly based on vaccination with dead or living vaccines in endemic areas.

Principles of Testing

Microtiter strips coated with S. abortusovis lipopolysaccharide (LPS) are incubated with collected samples. During this incubation step, anti-S. abortusovis antibodies bind to the antigen, forming specific complexes. Antigen-antibody complexes are detected by anti-sheep IgG HRP-conjugated secondary antibody. Revelation step is performed incubating the strips with 2,2'-azino-bis(3- ethylbenzthiazoline-6-sulfonic acid) (ABTS) as chromogen and reading the absorbance values at 405 nm by ELISA microplate reader.

Storage

Store at 2-8°C

Specimen Collection And Preparation

Vortex sample 3-5 seconds

Avoid taking any aggregates present on the bottom of the tube

Check that the tip does not become blocked during the sampling

If the sample is slimy, cut the tip before withdrawing Dilute each test sample 1:100v/v in Buffer A

Assay Procedure

1. Dispense 100µl of negative control into duplicate wells
2. Dispense 100µl of positive control into duplicate wells
3. Dispense 100µl/well of 1:100v/v diluted sera into the appropriate wells
4. Check that the volume is the same in the two replicate wells.
5. Cover the strips or plate with aluminium foil and incubate at 37±1°Cfor 60±5 minutes
6. Wash the microtiter strips five times with reconstituted Buffer B
7. Dispense 100µl/well of HRP-conjugated secondary antibody
8. Cover the strips or plate with aluminium foil and incubate at 37°C±1°C for 60± 5minutes
9. Wash the microtiter strips five times with approximately 300 µl reconstituted Buffer B.
10. Add 100 µl/well of ABTS solution
11. Cover the microtiter strips and incubate at room temperature (22-27°C) for 25± 5 minutes
12. Read the absorbance at 405nm using a microplate reader

Sensitivity

Diagnostic sensitivity: 96%

Specificity

Diagnostic specificity: 98%