

# BRUCELLA C-ELISA ANTIBODY TEST

## SVANOVIR® Brucella-Ab C-ELISA

### BRUCELLOSIS

Brucella is the causative agent of brucellosis, a zoonosis of worldwide importance. The disease is caused by a gram negative coccobacilli (*Brucella abortus*, *melitensis*, *ovis*, *suis*, *canis*). The common reservoirs for Brucella bacteria that may infect humans are cattle, dogs, sheep, goats, and pigs but also a number of wildlife species can be infected. Brucellosis occurs worldwide. Control measures include vaccination and/or test-and-slaughter of infected animals, as well as pasteurization of milk and dairy products.

Bovine brucellosis is usually caused by *B. abortus*, less frequently by *B. melitensis*, and occasionally by *B. suis* whereas ovine and caprine brucellosis is primarily caused by *B. melitensis* (biovars 1, 2 or 3). Brucellosis in pigs is caused by *B. suis* (biovars 1, 2 or 3). Control measures often includes vaccination, where Brucella abortus strain 19 is the reference vaccine for cattle and for small ruminants the vaccine strain Rev 1 is the most common.

The only definitive diagnosis is bacterial culture of the causative organism. However, this is a time consuming and expensive procedure. Presumptive diagnosis in cattle, sheep, goats and pigs can be made assessing serological responses to

Brucella antigens, a technique which is very often used to screen animals in control and eradication programmes. Various conventional tests, such as agglutination and complement fixation tests, and ELISA test are used. Not all are prescribed by OIE for international trade. However, for all the above species the ELISA technology is. The Indirect ELISA tests are often used as screening tests. Many of the ELISA test have been shown to suffer from the same disadvantages as for the conventional tests, such as cross reactions and not being able to distinguish vaccinates from infected. Due to lower specificity of the screening assays it is recommended to use an established confirmatory and/or complementary strategy.

### SVANOVIR® BRUCELLA-Ab C-ELISA

SVANOVIR® Brucella-Ab C-ELISA is developed to detect Brucella antibodies in bovine, ovine, caprine and porcine serum samples. It has been validated with various species and is more specific compared to many other serological tests. It is also capable of the discrimination between infected cattle and those vaccinated with S19.

### Brucella C-ELISA antibody test

A competitive ELISA for the detection of Brucella antibodies in bovine, ovine, caprine and porcine serum samples.

Product name	Article no	Format	plates	tests	samples
SVANOVIR® Brucella-Ab C-ELISA	10-2701-02	strips	2	192	176
SVANOVIR® Brucella-Ab C-ELISA	10-2701-10	plate	10	960	880

## PERFORMANCE CHARACTERISTICS

### Bovine samples

Sensitivity: 98.0% <sup>1)</sup>

Specificity: 99.7% <sup>2)</sup>

<sup>1)</sup> 331 samples from Canada, reference method: culture

<sup>2)</sup> 1144 samples from negative herds in Canada

### Ovine samples

Sensitivity: 100% <sup>1)</sup>

Specificity: 100% <sup>2)</sup>

<sup>1)</sup> 112 samples from Iran, Israel, reference method: serology and/or culture

<sup>2)</sup> 127 samples from Sweden

### Porcine samples

Sensitivity: 94.8% <sup>1)</sup>

Specificity: 98.4% <sup>2)</sup>

<sup>1)</sup> 1039 samples from France, reference method: CFT

<sup>2)</sup> 308 samples from France from a free and false positive sero-reactor herd, reference method: serology

## SVANOVIR® BRUCELLA Ab C-ELISA FOR THE DETECTION OF BRUCELLA ANTIBODIES IN BOVINE, OVINE, CAPRINE AND PORCINE SERUM SAMPLES

- Multispecies assay
- High specificity, less cross reactivity with other gram negative bacteria
- Rapid (less than 1.5 hours)
- Discriminates between S19 vaccinated and infected cattle

## SVANOVA BIOTECH AB

Svanova Biotech AB was established in the beginning of 2001. The company has been founded upon the activities, which have been ongoing since 1988 within SVA, the National Veterinary Institute, in Uppsala, Sweden.

Svanova Biotech AB develops, manufactures, markets and sells a wide range of diagnostic products for large-scale laboratories as well as for the veterinarians in the clinic or on the field, mainly for diagnosing infectious diseases in livestock and companion animals.

The majority of the products are based on the ELISA technique, marketed under the trade name SVANOVIR®, detecting antibodies against different microorganisms, such as viruses, bacteria, parasites or mycoplasma in various animal species.

SVANOVIR® products are manufactured by Svanova Biotech AB in accordance with an ISO 9001 certification. The products are developed, evaluated and adapted to the needs of the veterinary diagnostic laboratories.

One of the strengths of Svanova Biotech AB is the in-depth cooperation with specialists and researchers throughout the world. One of them is SVA, where, due to the long and close relationship, all the know-how and expertise is available to Svanova Biotech AB.

## SVANOVIR®

Svanova's ELISA product line is known as SVANOVIR®. The SVANOVIR® products are developed, evaluated and adapted to the needs of the veterinary diagnostic laboratories and are manufactured according to ISO 9001. The quality of our processes, products and services are continuously being optimised and improved to satisfy the needs of our customers.

### LEGAL DISCLAIMER

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