SVANOVIR® *A. suum*-Ab

The first screening tool for detecting significant infection levels of *Ascaris suum* in fattening units

SUMMARY | The SVANOVIR® *A. suum*-Ab assay is an indirect ELISA based on the haemoglobin of the parasite thus enabling the detection of antibodies to larval and adult stages. The assay indicates when a significant level of exposure in fattening units has been exceeded.

YOUR CHALLENGE is a subclinical disease resulting in production loss

Pigs are infected when they take up infective parasite eggs that are present in the environment. Not only the presence of adults, but also the migration of the larval stages of this parasite have been shown to pose a significant challenge to the health and growth rate of the pigs. In current high intensity pig farming, herd-level prevalence of *Ascaris suum* (*A. suum*) has been demonstrated to range from 40-70%.

YOUR GOAL is to identify pig units in which significant infection levels are exceeded

The goal of control is the reduction of eggs in the environment by sanitary measures and in the pig by anthelminthic treatment. Standard tests have limitations in quantifying levels of exposure in the environment (faecal egg count) and in the pigs (count of white spots in the liver). Positive test results of serum samples in the ELISA indicate a significant exposure and provide guidance in the control of *A. suum* infection.

ASSAY OVERVIEW

SVANOVIR® *A. suum*-Ab

Species	Porcine		
Samples	Serum		
Type	Indirect ELISA based on *Ascaris suum* haemoglobin		
Article number	**Samples***	**Plates**	**Format**
10-7100-02	184	2	Strips

*Samples: Max number of samples for analysis, wells for kit controls excluded.

Pioneer assay for sero-monitoring of *Ascaris suum* infections in fattening pig units

Validated for determining the infection level in the fattening units

Effective screening tool that enables continuous monitoring of the effectiveness of control strategies

Thoroughly **validated in experimentally and naturally infected pig populations**

Developed in collaboration with the Department of Virology, Parasitology and Immunology at **Ghent University,** Belgium.

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SVANOVIR® *A. suum*-Ab assay is a well validated antibody ELISA for semi-quantitative analysis of *A. suum* infection. The assay clearly sets a new standard for the control of *A. suum* infection in fattening pig units.

Effective handling with ready-to-use conjugate and strip format

High quality - thoroughly validated and manufactured under strict ISO 9001:2008 standardised procedures in Sweden

PERFORMANCE CHARACTERISTICS
SVANOVIR® *A. suum* -Ab

The SVANOVIR® *A. suum*-Ab assay has been validated in comprehensive studies of experimentally and naturally infected pig populations (Vlaminck *et al*., 2012). In the experimental study, a total of 190 piglets were infected continuously with *A. suum* eggs for the duration of 14 weeks. The results of the analysis of the serum samples with the SVANOVIR® *A. suum*-Ab assay showed that the test has a high diagnostic sensitivity (100%) and specificity (99,1%) for detecting long-term roundworm exposure. In contrast, only 68% of the pigs tested after 14 weeks tested positive on faecal examination.

In a field study using the SVANOVIR® *A. suum*–Ab assay on fattening pig units, around 70% of the investigated farms showed a prevalence of *A. suum* in fatteners of 90-100%. In contrast, the parallel investigation of eggs of *A. suum* in the faeces revealed a prevalence as low as 30%. These results further highlight the superior sensitivity of the SVANOVIR® *A. suum*–Ab assay compared to conventional screening of faecal samples.

SVANOVIR® *A. suum-Ab* antibody levels	**ODR < cut-off**	**ODR > cut-off**
Parasite presence	None to low	Medium to high
Results indicate	**No/low economic impact**	**Possible significant economic impact**
Decision-making support	Control is effective. No additional control measures required.	Control is ineffective. Increased measures for parasite control are required.

YOUR SUPPORT

From 9am-4pm CET call:

☎ **+46 18 65 49 15**

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Reference

Vlaminck J., Nejsum P., Van Groenweghe F., Thamsborg S.M., Vercruysse J., Geldhof P. Evaluation of a serodiagnostic test using *Ascaris suum* haemoglobin for the detection of roundworm infection in pig populations. Veterinary Parasitology 2012 189(2-4):267-73.

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