SVANOVAR® *L. intracellularis*/Ileitis-Ab

**Diagnostics for the efficient use of control measures**

**SUMMARY** | The SVANOVAR® *L. intracellularis*/Ileitis-Ab is the compliant successor (materials, protocols and result interpretations) of the field proven bioScreen Ileitis Antibody ELISA. This assay shall carry forward the great advances achieved in disease epidemiology and control of *Lawsonia intracellularis*.

**YOUR CHALLENGE** is an ubiquitous bacteria
Porcine Proliferative Enteropathy (PPE, Ileitis) is a wide spread enteric disease caused by the intracellular bacteria *Lawsonia intracellularis* (*L. intracellularis*). Epidemiology is strongly influenced by farm characteristics, thus showing big variations in time of onset, severity and prevalence of infection. The two major forms of ileitis are a subclinical disease of chronic diarrhea leading to poor performance in pigs or an acute disease resulting in severe diarrhea with high mortality. Both forms result in severe financial concerns.

**YOUR GOAL** is to schedule control measures properly
Preventing or reducing incidence and severity of clinical disease as well as performance improvements are major goals in controlling PPE. Vaccination, management improvements and biosecurity have gained importance in the control of PPE which significantly influences the reliance on antibiotic medication. Preventative methods shall be scheduled prior to anticipated onset of relevant infection with *L. intracellularis*. Serology overcomes the limitation of sporadic detection of *L. intracellularis* in feces. ELISA enables high sample throughputs with comparable results to indirect fluorescent antibody test.

**ASSAY OVERVIEW**

**Assays**

<table>
<thead>
<tr>
<th>Species</th>
<th>Porcine</th>
</tr>
</thead>
<tbody>
<tr>
<td>Samples</td>
<td>Serum/plasma</td>
</tr>
<tr>
<td>Type</td>
<td>Blocking ELISA based on whole cell <em>L. intracellularis</em> antigen</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Art. number</th>
<th>Format</th>
<th>Tests</th>
<th>Samples</th>
</tr>
</thead>
<tbody>
<tr>
<td>122275</td>
<td>2 plates</td>
<td>192</td>
<td>184</td>
</tr>
</tbody>
</table>

Tests: Number of tests.

Samples: Number of samples, wells for kit controls excluded.

**New compliant successor** of the bioScreen Ileitis Antibody ELISA
- SVANOVAR® *L. intracellularis*/Ileitis-Ab

**Continuation of established monitoring strategies** for routine diagnostic and vaccination

**Sero-monitoring of groups/herds** for exposure to *L. intracellularis*

**Sero-profiling of herds**
Enabling informed decisions about
- scheduling of control measures
- planning of (re)placement of pigs

**Verifying right time of vaccination**
PERFORMANCE CHARACTERISTICS
SVANOVIR® *L. intracellularis*/Ileitis-Ab

A total of 125 serum samples from experimentally infected pigs were pre-classified according to exposure to *L. intracellularis* (expected positives) vs. history of freedom of infection (expected negatives). Both ELISA were run by the same person on the same occasion according to the respective kit insert. The overall agreement of the bioScreen Ileitis Ab ELISA and the SVANOVIR® *L. intracellularis*/Ileitis-Ab was 98.5%. All pre-classified negatives were negative in both assays, revealing 100% agreement. The agreement on the positive sample set was 98%, because the bioScreen Ileitis Ab ELISA displayed two samples of the expected positives as doubtful whereas the SVANOVIR® *L. intracellularis*/Ileitis-Ab classified them as positive (Goeser and Lindh, 2016).

In conclusion, the bioScreen Ileitis Antibody ELISA and SVANOVIR® *L. intracellularis*/Ileitis-Ab are highly comparable. Both assays are 100% specific with a slightly higher sensitivity of the SVANOVIR® *L. intracellularis*/Ileitis-Ab. Together with a sampling plan based on estimated herd prevalence of *Lawsonia intracellularis* infection, both assays are highly suitable for decision making on herd level.

References

YOUR SUPPORT
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Complimentary products for enteric disease investigations

<table>
<thead>
<tr>
<th>Product</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>VETSIGN™ Salmonella-Ab</td>
<td>Controlling Salmonella at essential stages of pork production</td>
</tr>
<tr>
<td>SVANOVIR® TGEV/PRCV-Ab</td>
<td>The first antibody ELISA that accurately differentiates between TGEV and PRCV</td>
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