SVANOVIR® BRSV-Ab

Detecting antibodies specific to Bovine Respiratory Syncytial Virus (BRSV) in cattle

**SUMMARY** | SVANOVIR® BRSV-Ab detects antibodies specific to BRSV in serum/plasma and milk from individuals, and in bulk milk samples. The assay provides accurate results, which are essential for the evaluation of maternal immunity in calves before vaccination, for the identification of cows exposed to BRSV, and herds free from infection.

**YOUR CHALLENGE** is a virus that paves the way for bacterial infection

BRSV is ubiquitous and spreads rapidly in dense cattle populations, especially those with low herd immunity. Secondary opportunistic bacterial or mycoplasmal infections follow exposure to BRSV and frequently aggravate the clinical symptoms. BRSV disease can be often severe in calves after a decline of their maternal antibodies and in previously non-exposed animals.

**YOUR GOAL** is to detect the virus behind the respiratory disease

There are several different viruses that can cause respiratory disease. Besides BRSV, those of major significance include Bovine Herpesvirus 1, Parainfluenza 3 and Bovine Coronavirus. Farmers face economic loss owing to decreased performance and considerable consumption of medication to prevent secondary bacterial infection. The most important factor in dealing with respiratory diseases is changing management routines to improve herd health.

**ASSAY OVERVIEW**

<table>
<thead>
<tr>
<th>SVANOVIR® BRSV-Ab</th>
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<tbody>
<tr>
<td><strong>Species</strong></td>
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<tr>
<td><strong>Samples</strong></td>
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<tr>
<td></td>
</tr>
<tr>
<td><strong>Type</strong></td>
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<tr>
<td><strong>Article number</strong></td>
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<tr>
<td><strong>Samples</strong></td>
</tr>
<tr>
<td><strong>Plates</strong></td>
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<tr>
<td><strong>Format</strong></td>
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</tbody>
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* Samples: Max. number of samples for analysis, wells for kit controls excluded.

**High specificity** – reliable results for controlling the spread of BRSV

**Effective screening** of bulk tank milk

**Enables informed decision making** in management routines

**Screening of calves** – determine the optimal time for vaccination after decline of maternal antibodies
PERFORMANCE CHARACTERISTICS

**SVANOVIR® BRSV-Ab**

On a large number of serum samples from two different populations (herds free of infection and herds with BRSV infection) in Sweden and England, the assay detected antibodies to BRSV accurately. Good agreement is seen between serum and milk antibody levels. Additionally the assay detects differences in antibody levels (3-fold increase of OD values) in paired diagnostic samples (Elvander et al., 1995). SVANOVIR® BRSV-Ab has also been successfully used for monitoring infection of BRSV in calves (Hägglund et al., 2006).

<table>
<thead>
<tr>
<th>Test</th>
<th>Reference ELISA</th>
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<tbody>
<tr>
<td>SVANOVIR® BRSV-Ab</td>
<td></td>
</tr>
<tr>
<td>Positives</td>
<td>93</td>
</tr>
<tr>
<td>Negatives</td>
<td>6</td>
</tr>
<tr>
<td>Total</td>
<td>99</td>
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<tr>
<td>Sensitivity</td>
<td>94%</td>
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<tr>
<td>Specificity</td>
<td>100%</td>
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Samples from (a) Sweden and England from populations with history of respiratory disease

References


YOUR SUPPORT

From 9am-16pm CET call:

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COMPLIMENTARY DIAGNOSTIC SOLUTIONS

<table>
<thead>
<tr>
<th>Kit</th>
<th>Description</th>
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<tbody>
<tr>
<td>SVANOVIR®BCV-Ab</td>
<td>Detecting antibodies specific to Bovine Coronavirus</td>
</tr>
<tr>
<td>SVANOVIR®PIV3-Ab</td>
<td>Detecting antibodies specific to Bovine Parainfluenza Virus Type 3</td>
</tr>
<tr>
<td>SVANOVIR®IBR-Ab</td>
<td>Detecting antibodies specific to Bovine Herpesvirus 1</td>
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