



## SVANOVIR® PIV3-Ab

# Managing Bovine Parainfluenza Type 3 (PIV3) infection in cattle herds

**SUMMARY** | SVANOVIR® PIV3-Ab detects antibodies to PIV3 in bovine serum/plasma and milk of infected cattle. In several scientific studies and field investigations, the assay shows high specificity. This is of great benefit in management routines as it allows the separation of exposed and non-exposed individuals to avoid introduction and spread of the disease in cattle populations.



### **YOUR CHALLENGE** is a seasonally reoccurring disease

PIV3 leads to reoccurring seasonal epidemics. External factors causing low immunity make herds predisposed for viral infections. However, respiratory disease is often not noticed before opportunistic bacteria or mycoplasma aggravate symptoms. Critical factors in PIV3 control include improvement of both disease management and environmental factors that strengthen the animals' immune responses to infections (e.g. hygiene, ventilation and nutrition).

### **YOUR GOAL** is to quickly and conveniently identify PIV3 exposure

PIV3 spreads easily and effectively by aerosols, direct and indirect transmission resulting in high prevalence on cattle farms when the virus is circulating. Commonly, paired samples are used in the assessment of exposure, such that an increase in the levels of antibodies to PIV3 indicates acute infection. Work efficient and specific assays are essential for detecting exposure of cattle to PIV3.

**High specificity** – reliably identifies antibodies to PIV3 when prevalent in cattle populations

**Excellent results in paired diagnostic samples** – single-dilution assay for detection of changes in levels of antibodies to PIV3

**Time and work efficient** – results provide valuable information for informed decision making in management routines

## ASSAY OVERVIEW



### SVANOVIR® PIV3-Ab

<b>Species</b>	Bovine		
<b>Samples</b>	Serum/plasma Milk, individual and bulk milk		
<b>Type</b>	Indirect ELISA detecting IgG <sub>1</sub>		
<b>Article number</b>	<b>Samples*</b>	<b>Plates</b>	<b>Format</b>
104889	88	2	Strips

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

SVANOVIR® PIV3-Ab delivers the accurate results needed for monitoring respiratory diseases caused by PIV3 in cattle. It is a valuable tool for evaluating exposure to PIV3 and provides essential information for management routines and movement of livestock.

**Dual functionality** – detection of PIV3 in serum/plasma and milk in the same assay


**Easy protocol**, ready-to-use conjugate and results in <2.5 hrs

**High quality** – validated and manufactured under strict ISO 9001:2008 standardised procedures in Sweden

**Multilingual labels**

## YOUR SUPPORT

From 9am-16pm CET call:

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## PERFORMANCE CHARACTERISTICS SVANOVIR® PIV3-Ab

In numerous scientific studies on samples from naturally infected cows, SVANOVIR® PIV3-Ab demonstrated excellent performance (Graham et al., 1998). The test's high specificity minimises the risk of false positive errors, avoiding the costs of additional biosecurity measures. This high specificity, together with the quantitative feature of diagnostic sampling, enables the identification even of recently exposed individuals and herds. This is essential to avoid further spread of PIV3 and to take the right decisions in management routines.

Serum of naturally infected cattle n=153 <sup>a</sup>			
Test	HI* test		
	Positives	Negatives	Total
SVANOVIR® PIV3-Ab			
Positives	83	4	87
Negatives	1	65	66
Total	84	69	153
	Sensitivity	95.4%	
	Specificity	98.5%	

Samples from <sup>(a)</sup> Sweden, \* haemagglutination inhibition

### References

Graham DA, McShane J, Mawhinney KA, McLaren IE, Adair BM, Merza M. (1998): Evaluation of a single dilution ELISA system for detection of seroconversion to bovine viral diarrhoea virus, bovine respiratory syncytial virus, parainfluenza-3 virus, and infectious bovine rhinotracheitis virus: comparison with testing by virus neutralization and hemagglutination inhibition. J Vet Diagn Invest. 1998 Jan;10(1):43-8.

## COMPLIMENTARY PRODUCTS for detecting exposure to bovine viruses causing respiratory disease

**SVANOVIR® BCoV-AB** - Detecting antibodies specific to Bovine Coronavirus in serum/plasma and milk (individual and bulk milk)

**SVANOVIR® BRSV-AB** - Detecting antibodies specific to Bovine Respiratory Syncytial Virus in serum/plasma and milk

**SVANOVIR® IBR-Ab** - Detecting antibodies specific to Bovine Herpesvirus 1

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