SVANOVIR® TGEV/PRCV-Ab

The first antibody ELISA that accurately differentiates between Transmissible Gastroenteritis Virus and Porcine Respiratory Coronavirus

SUMMARY | SVANOVIR® TGEV/PRCV-Ab is a blocking ELISA assay enabling discrimination between antibodies to Transmissible Gastroenteritis Virus and Porcine Respiratory Coronavirus. This is a great benefit in management of outbreak investigations, eradication programs and herd-screenings prior to movement of animals.

YOUR CHALLENGE is antigenic similarity of two corona virus variants

In naïve herds, Transmissible Gastroenteritis Virus (TGEV) causes an acute, highly contagious diarrhoeal disease with a high mortality rate in very young piglets. In adult pigs, the disease is mild to unapparent. In pig herd production, it is essential to differentiate TGEV from Porcine Respiratory Corona Virus (PRCV), a genetic variant of the Coronavirus which causes only a mild disease.

YOUR GOAL is to differentiate between TGEV and PRCV

TGEV and PRCV are prevalent in swine herds worldwide. It is essential to differentiate between the variant that has the potential to cause explosive outbreaks and the fairly mild variant of low socioeconomic importance. Reliable diagnostic is essential for maintaining herd health and a great benefit in situations of movement of pigs to new herds and facilities.

ASSAY OVERVIEW

SVANOVIR® TGEV/PRCV-Ab

Species	Porcine (incl. wild boars)		
Samples	Serum/plasma		
Type	Blocking ELISA with anti-TGEV mAb & anti-TGEV/PCRV mAb		
Article number	**Samples***	**Plates**	**Format**
10-7500-02	88	2	Strips

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

Pioneer serological test
The only assay that can differentiate between TGEV and PRCV

High specificity, the assay for confirming TGEV infection

Validated for application in **domestic pigs and wild boars**

Reliable results, rules out PRCV infection in individuals and herds and provides confidence for trading certificates

Prescribed test method for international trade by OIE

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SVANOVIR® TGEV/PRCV-Ab differentiates between TGEV and PRCV infections, and is a valuable tool for outbreak investigations, eradication programs and herd- screenings prior to movement of pigs.

Easier protocol and shorter processing time as compared to Virus Neutralisation Test (VNT)

Effective handling with a single dilution assay without titration

High quality. The assay is thoroughly validated and manufactured under strict ISO 9001:2008 standardised procedures in Sweden

Multilingual kit insert and labels

YOUR SUPPORT

From 9am-4pm CET call:

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PERFORMANCE CHARACTERISTICS
SVANOVIR® TGEV/PRCV-Ab

In several studies the SVANOVIR® TGEV/PRCV-Ab assay correctly discriminated between TGEV and PRCV infections. The ability to specifically detect PRCV minimizes the probability of false positive TGEV results and subsequent exclusion of those pigs for trading. SVANOVIR® TGEV/PRCV-Ab assay shows strong correlation with the Virus Neutralisation Test (VNT) on serum samples from Canadian pig herds (Carman et al. 2002), and furthermore SVANOVIR® TGEV/PRCV-Ab is superior to VNT because it can differentiate between antibodies to TGEV and PRCV. A specificity of 100% has been demonstrated in wild boar populations with historical freedom of disease (Hälli et al., 2012).

TGEV positive herds n_{pos}= 44[a]	SVANOVIR® TGEV/ PRCV-Ab	Commercial ELISA
TGEV neg/ PRCV neg	1	9
Inconclusive	2	23
TGEV pos	41	12

Interpretation (% correct)	**41/44 (93%) TGEV positive**	**12/44 (27%) TGEV positive**
TGEV negative herds n_{neg}= 56[b]		
TGEV neg/ PRCV neg	35	39
TGEV neg/ PRCV pos	21	17

Samples a from Russia, b from Sweden

	Sensitivity	**Specificity**
n= 1,782[a]	**97. 9 %**	**96.4 %**
Test	VNT* positive	VNT* negative
SVANOVIR®ELISA TGEV or PRCV positive	774	36
SVANOVIR®ELISA TGEV or PRCV negative	17	955

Samples from a 100 commercial herds in Canada (30% had a clinical history of TGEV infection), * virus neutralisation test

References: Carman et al., 2002: Field validation of a commercial blocking ELISA to differentiate antibody to transmissible gastroenteritis virus (TGEV) and porcine respiratory coronavirus and to identify TGEV-infected swine herds. J Vet Diagn Invest 14:97-105.
Hälli, O., Ala-Kurikka, E., Nokireki, T., Skrzypczak, T, Raunio-Saarnisto, M., Peltoniemi, O.A.T., Heinonen, M. (2012): Prevalence of and risk factors associated with viral and bacterial pathogens in farmed European wild boar. Volume 194, Issue 1, Pages 98-101.

PITGEV/02