



## SVANOVIR® EHV1/EHV4-Ab

# Pioneer ELISA for discriminating antibodies to Equine Herpesvirus type 1 and 4

**SUMMARY** | SVANOVIR® EHV1/EHV4-Ab is a highly discriminative test for detecting antibodies to Equine Herpesvirus (EHV) type 1 and type 4. The assay has been validated by different Universities showing the assays ability to contribute to correct management of EHV positive horses during outbreaks, tournaments and race-meetings.



### Your challenge is a herpesvirus that has two main variants

The two major types of equine herpesvirus have different clinical significance. EHV-1 infections can cause severe respiratory infection, abortions, neonatal foal death, and myeloencephalopathy. In contrast, EHV-4 primarily causes respiratory disease. Both types can cause a life-long latent infection with recurrent reactivation leading to clinical disease.

### Your goal is to discriminate between antibodies of EHV-1 and EHV-4

EHV-1 and EHV-4 infections are ubiquitous, however, EHV-4 infection is more prevalent than EHV-1. Being able to discriminate between antibodies of the two types is of major importance to detect EHV-1 exposure and protect remaining horses from transmission. At the same time presence of EHV-4 should not initiate costly sanitation procedures and quarantine of affected horses which is indicated to prevent spread of EHV-1. Antibodies to EHV are highly cross reactive and thus highly specific tests are needed for accurate discrimination between the two types.

### ASSAY OVERVIEW

#### SVANOVIR® EHV1/EHV4-Ab

Species	Equine		
Samples	Serum and plasma		
Type	Indirect ELISA based on type specific recombinant glycoprotein G fusion proteins		
Article number	Samples*	Plates	Format
104901	52	2	Strips



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

**The only ELISA that can discriminate between EHV-1 and EHV-4 infection**

**High accuracy**- the tool for detecting infection of EHV-1 in EHV-4 positive horses

**Evidence for decision making** – detects maternal antibodies and gives guidance to best time for vaccination to EHV-1 in foals

**Allows risk-classification of mares** into EHV-1 exposed and susceptible groups

**Developed in collaboration with the Centre for Equine Virology, University of Melbourne**

SVANOVIR® EHV1/EHV4-Ab is highly discriminative between EHV-1 and EHV-4 and is an effective and reliable tool for managing outbreak situations and classifying horses as free of EHV-1

**Approved by the University of Kentucky** as an easy-to-use tool offering good results rapidly

**Time efficient** – discriminate between EHV-1 and EHV-4 infection in one assay

**Easy protocol and results in <3.5 hrs**

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

## YOUR SUPPORT

From 9am-4pm CET call:

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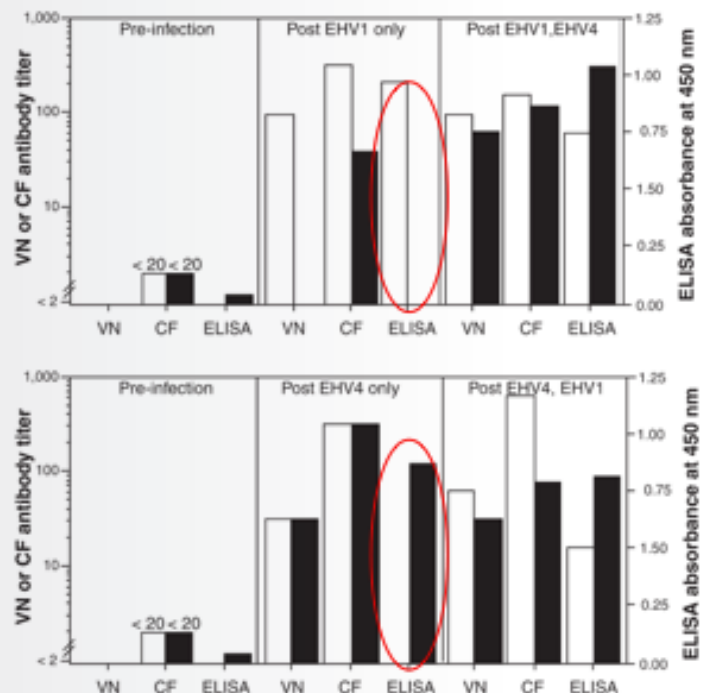
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## PERFORMANCE CHARACTERISTICS SVANOVIR® EHV1/EHV4-Ab

SVANOVIR® EHV1/EHV4-Ab can discriminate between infection with EHV-1, EHV-2 and detect EHV-1 and EHV-4 coinfection.

Horse populations	EHV1	EHV4
Exposed to EHV1	+	-
Exposed to EHV4	-	+
Exposed to EHV1 & EHV4	+	+

The ELISA was evaluated in experimentally and naturally infected individuals (Hartley et al., 2005; Crabb et al., 1995). In the experimental study on foals, SVANOVIR® EHV1/EHV4-Ab could clearly discriminate between EHV-1 and EHV-4 infection and did not provide false positive results as observed by virus neutralisation and complement fixation test.



**Figure:** Comparison of serologic results from virus neutralisation (VN), complement fixation (CN) and SVANOVIR® EHV1/EHV4-Ab ELISA of serum samples from specific pathogen free foals before (pre-infection) and after infection (post EHV-1 or/and -4) Open bars: values for EHV-1, closed bars: values for EHV-4 (Hartley et al., 2005)

**Reference:** Crabb, B. S., MacPherson, C. M., Reubel, G. H., Browning, G. F., Studdert, M. J., Drummer, H. E. (1995): A type-specific serological test to distinguish antibodies to equine herpesviruses 4 and 1. Arch. Virol. 140, 245-258.

Hartley CA, Wilks CR, Studdert MJ, Gilkerson JR. (2005): Comparison of antibody detection assays for the diagnosis of equine herpesvirus 1 and 4 infections in horses. Am J Vet Res. 66:921-8.