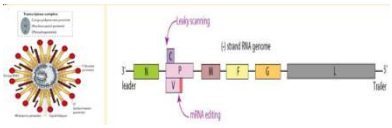
ALPHA DIAGNOSTIC INTERNATIONAL

Product Data Sheet

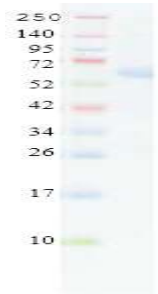
□ Cat # HEVG11-C	Purified Hendra Virus Glycoprotein control for Western Blotting	Size: 100 ul
□ Cat # HEVG11-S	Rabbit Anti-Hendra Virus Glycoprotein antisera	Size: 100 ul
□ Cat # HEVG15-R-10	Recombinant Hendra Virus Glycoprotein (aa 71-604, his-tag)	Size: 10 ug

Hendra Virus (HeV) is a member of the Paramyxoviridae virus family, which also includes the Henipavirus, Nipah Virus, and Cedar virus, another zoonotic pathogen of domestic animals and humans. Cedar virus has not caused infection in animals or humans. Hev virus infection is a rare emerging zoonosis that causes severe disease in both infected **horses and humans** which, to date, has only been identified in Australia. The natural host of the virus has been identified as fruit bats of the Pteropodidae Family, Pteropus genus. HeV was first identified during the first recorded outbreak of the disease that took place in the Brisbane suburb of Hendra, Australia, in 1994. Horses have been identified as the intermediate hosts, transmitting infection to humans through close contact during care or necropsy of the ill or dead horses. Symptoms of HeV infection in humans range from mild influenza-like illness to fatal respiratory or neurological disease. Horses are the only animal species in which natural infection of HeV has been reported, with a case fatality of approximately 75%. There is **no approved vaccine** for either humans or animals. The route of transmission from flying foxes to horses is uncertain, but the virus is thought to be spread by environmental contamination, and ingested or inhaled by the horse.



HeV has a negative sense RNA genome (18 Kb) bound to nucleocapsid proteins. The surface of the lipid envelope is studded with attachment glycoproteins and fusion glycoproteins that help the virus bind and integrate with the host cells. Hev encodes nine proteins.

Western Blot recombinant protein control



Hendra virus Glycoprotein was expressed in E. *coli*. It contains a c-terminal His-tag. The Glycoprotein corresponds to the virion surface region. It migrates as a band of approximately 60.5 kDa in reducing conditions. Purified Hendra virus Glycoprotein (**cat# HEVG11-C)** Western Blot control is supplied in Laemmli buffer at a concentration of 10 ng/ul. Heat the sample at 95°C then load 1-5 ul for good visibility with appropriate antibodies.

QC: The titer was assessed in an indirect ELISA by coating 1 ug/ml of recombinant Hendra Virus Glycoprotein (**cat#HEVG15-R-10**). Sera was diluted and incubated for 1 hour, after 1 hour, the plate was washed and incubated for 30 minutes with Goat anti-Rabbit IgG HRP. The plate was washed and developed with TMB. PI represents serum from the rabbit before immunization at a 1:100 dilution

A450	0.016	0.102	2.93	1.69	0.5
Dilution	0	PI	1k	10k	100k

Form and storage of Hendra Virus Glycoprotein antibodies:

Immunogen: Rabbits were immunized with recombinant E. coli expressed Hendra virus Glycoprotein (extracellular domain)

Purification: N/A

Whole sera

□ **Solution**

Supplied in as neat sera w/ 0.01% sodium azide

□ **Lyophilized** Reconstitute powder in 100 ul distilled water

Storage

Short-term: 1 month at 4°C.

Long-term: at –20°C or below in suitable aliquots after reconstitution. Can be frozen, but avoid multiple freeze/thaw cycles

Stability: 24 months at –20°C or below.

Recommended Usage:

Western Blotting: 1:1k to 1:5k

ELISA: Assay dependent concentration

The above concentrations are a suggestion, user's must dilutions based on their own assay. The antibody may work in other applications not listed above.

Protein homology: Hendra Virus Glycoprotein is 79% homologous with Nipah virus glycoprotein,

This product is for in vitro research use only.

Related Material available for ADI

Catalog#	Description
NIV21-R-25	Recombinant (E. coli) Nipah virus (NiV) Nucleoprotein (full length, >95% Pure, His-tag)
NIV21-S	Rabbit anti-Nipah virus (anti-NiV) Nucleoprotein antiserum
NIV21-C	Purified Nipah virus Nucleoprotein control for Western Blotting

ELISA kits for the detection of anti-Nucleoprotein and Glycoprotein are also available from ADI.

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