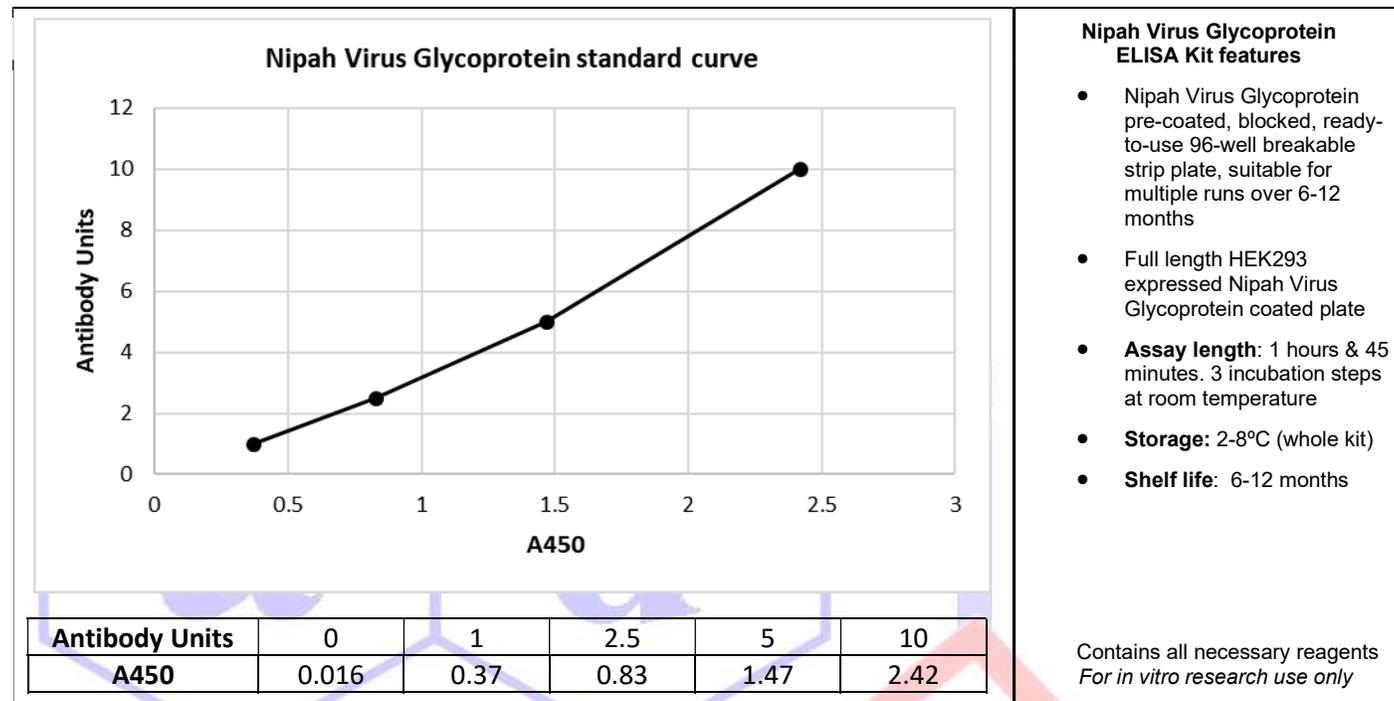


Anti-Nipah Virus Glycoprotein ELISA Kit

The anti-Nipah Virus Glycoprotein ELISA Kit is a sensitive indirect ELISA for the measurement of IgG or IgM antibodies in serum or plasma to Nipah Virus Glycoprotein



Assay Procedure: Allow all reagents to reach room temperature. Arrange and label required number of strips.

- Step 1.** Pipette 100 ul of appropriately diluted samples and calibrators into wells and incubate for 1 hour at room temperature.
- Step 2.** Wash the wells 3X with 300 ul of wash buffer for each well
- Step 5.** Add 100 ul of anti-Species IgG or IgM HRP conjugate to each well and incubate for 30 minutes at room temperature
- Step 6** Wash the wells 5X with 300 ul of wash buffer for each well
- Step 7.** Add 100 ul of TMB Substrate solution to all wells, mix gently, and incubate at room temperature for 15 minutes.
- Step 8.** Pipette 100 ul of stop solution into each well and mix gently. Measure at 450 nm w/ 630 nm as a reference filter if available.

Performance Characteristics

Precision: Intra-assay: <15% Inter-assay: <15%

Minimum recommended dilution

Serum and Plasma: 1:100

Note: Minimum recommended dilution represents the dilution which is needed to eliminate matrix interference effects and obtain optimal recovery. All samples must be diluted to at least the minimum recommended ratio. Samples may be further diluted if the sample values fall within the standard curve, if sample volume is to be preserved, or if the sample value is above the highest OD on the standard curve.

General Information

Nipah virus (NiV) is a single stranded RNA virus belonging to the family Paramyxoviridae, genus Henipavirus. It was first discovered in Malaysia in 1998. There are two lineages of NiV, a Malaysian strain (nNiV) and a Bangladesh strain (bNiV). The reservoir for Nipah is the flying fox, a fruit bat. The virus is capable of jumping from bats to pigs and transmission to humans has been shown to be caused by consumption of food contaminated by saliva or urine from infected flying foxes. Pigs are considered an amplifying host for NiV. Pig to human transmission is possible through direct contact or aerosol transmission. Outbreaks of Nipah occur annually in India and Bangladesh with fatality rates up to 75%. An outbreak of Nipah in Malaysia in 1999 led to over one million pigs being killed to stamp out the disease.

NiV is a BSL4 pathogen which makes diagnostic testing and research difficult, especially since it primarily occurs in countries which can lack the resources to perform the testing. Use of recombinant DNA technology eases the burden by allowing diagnosis in BSL2 laboratories. Diagnosis is primarily performed by virus neutralization tests and indirect ELISAs. NiV vaccines against the glycoprotein and fusion protein have shown promising results. A Hendra virus vaccine, which is closely related to Nipah, has been licensed for use in horses in Australia and shown cross-protection against NiV as well. The nucleocapsid (N) protein is also a common target for diagnosis. It is produced in large quantities during infection, post-mortem samples are diagnosed by the presence of nucleocapsid by Immunohistochemistry.