

Nipah virus Nucleoprotein Antibody

□ Cat # NIV21-A

Rabbit anti-Nipah virus (anti-NiV) Nucleoprotein antibody, affinity pure

SIZE: 100 ug

Nipah virus (NiV) is a single stranded RNA virus belonging to the family Paramyxoviridae, genus Heniparivirus. The virus consists of 6 proteins; Glycoprotein (G), Fusion (F), Matrix (M), Phosphoprotein (P), Nucleoprotein (N), and Polymerase (L). It was first discovered in Malaysia in 1998. There are two lineages of NiV, a Malaysian strain (mNiV) 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 can allow testing to be performed 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.

Source of Antigen or Antibodies

Uniprot: Q9IK92

Host: Rabbit

Form: Polyclonal, affinity purified over an antigen column

Specificity: Nipah virus

Alternative names: Nucleocapsid protein

Immunogen: Full length E.coli recombinant protein to Nipah virus (anti-NiV) Nucleoprotein

Subcellular Location: Virion, Host Cytoplasm

Cross reactivity: 100% homology with Nipah virus, 92.1% homology with Hendra virus

Form & Storage of Antibodies/Peptide Control

Affinity pure IgG

□ _____ ul Solution; Concentration: _____
Supplied in PBS+0.1% sodium azide

□ Lyophilized powder

Reconstitute powder in 200 ul PBS to 0.5 mg/ml

Antiserum

□ 100 ul □ Solution □ Lyophilized powder
Reconstitute powder in 100 ul PBS

Storage:

Short-term: 4°C for 1 month

Long-term: at -20°C or below in suitable aliquots after reconstitution for 1 year. Do not expose to multiple freeze/thaw cycles or store working, diluted solutions.

Recommended Usage

Western Blotting: 0.5-2 ug/ml using affinity pure.
Predicted band size: ~62 kDa

ELISA: Assay dependent concentration. Typically, 0.1-2.0 ug/ml for capture/detection antibodies.

Above concentrations are a suggestion and user's must optimize assay based on their conditions. Antibody may work in other applications such as Flow Cytometry, IF, or IHC. These methods have not been tested by ADI.

**This product is for In vitro research use only.*

Related materials available from ADI

Catalog#	Description
NIV11-S	Rabbit anti-Nipah virus (anti-NiV) Glycoprotein antiserum
NIV21-S	Rabbit anti-Nipah virus (anti-NiV) Nucleoprotein antiserum
NIV11-C	Purified Nipah virus Glycoprotein control for Western Blotting
NIV21-C	Purified Nipah virus Nucleoprotein control for Western Blotting
NIV-010	ELISA Kits mouse, monkey, human, ferret, guinea pig, hamster test animals Nipah virus
NIVE2B-A	Rabbit anti Ephrin-B2 (Nipah/Hendra receptor) antibody, affinity pure
NIV11-R-10	Recombinant (HEK) Nipah virus (NiV) Glycoprotein (aa: 71-602, >95% Pure, His-tag)
NIV21-R-25	Recombinant (E. coli) Nipah virus (NiV) Nucleoprotein (full length, >90% Pure, His-tag)
NIVE2B-S	Rabbit anti Ephrin-B2 (Nipah/Hendra receptor) antiserum

NIV21-A

180515AC