

Rabbit Polyclonal Anti-ZIKANS5 antibody

Catalog Number: ZIKANS5-101AP

Lot Number: 1536.TB1.PLD.AP

General Information

Product	Zika Virus NS5 Antibody
Description	Affinity Purified RNA-dependent RNA polymerase NS5 Antibody
Accession #	Gen Bank: ALX35659.1
Verified Applications	ELISA
Species Cross Reactivity	Zika virus
Host	Rabbit
Immunogen	Synthetic pepitde taken within amino acid region 3230-3280 on Zika virus NS5 protein.
Alternative Nomenclature	NS5 zika virus antibody RNA-dependent RNA polymerase NS5 antibody nonstructural protein 5 antibody

Physical Properties

Quantity	100 µg
Volume	200 µl
Form	Affinity Purified Immunoglobulins
Immunoglobulin & Concentration	0.65 mg/ml IgG in antibody stabilization buffer
Storage	Store at -20°C for long term storage.

Recommended Dilutions

ELISA	1:10,000
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Related Products

Catalog

Biotin-Conjugated	ZIKANS5-BIOTIN
FITC-Conjugated	ZIKANS5-FITC
Antigenic Blocking Peptide	P-ZIKANS5
Western Blot Positive Control	PC-ZIKANS5

Overview:

Zika virus (ZIKV) is an arthropod-borne virus (arbovirus) in the genus *Flavivirus* and the family *Flaviviridae*. The Zika virus is a sense single-stranded RNA virus (ssRNA) (also described as SSRNA positive sense virus, no DNA stage). The rapid spread of Zika virus through the Americas, together with the association of infection with microcephaly and Guillain-Barré syndrome, has resulted in the World Health Organization declaring a public health emergency. Its >10,000 bases code for three structural proteins (capsid (C), precursor membrane (prM), envelop (E)) and seven nonstructural proteins (NS). The NS2A, NS2B, NS4A, and NS4B proteins are smaller, hydrophobic proteins while NS1, NS3, and NS5 are large and highly conserved. Zika virus has the potential to spread to new areas where the *Aedes* mosquito vector is present and therefore presents a risk to the United States (1). Using single-cell RNA-seq and immunohistochemistry, it has been found that the candidate viral entry receptor AXL is highly expressed by human radial glial cells, astrocytes, endothelial cells, and microglia in developing human cortex and by progenitor cells in developing retina. It is also reported that AXL expression in radial glia is conserved in developing mouse and ferret cortex and in human stem cell-derived cerebral organoids, highlighting multiple experimental systems that could be applied to study mechanisms of ZIKV infectivity and effects on brain development (2).

The ZIKANS5 selective antibodies were generated against conserved sequences that are unique to the polyprotein ZIKA virus. The ZIKANS5-selective antibodies are affinity purified against immobilized antigen based affinity chromatography which yielded epitope-specific antibodies. Western blot positive control (PC-ZIKANS5) and antigenic blocking peptides (P-ZIKANS5) for ZIKANS5 are available. FabGennix carries antibodies against other viral proteins as well. For a complete listing please view our catalog at <http://fabgennix.com>.

References:

1. Sampathkumar P1, Sanchez JL2. Zika Virus in the Americas: A Review for Clinicians. *Mayo Clin Proc.* 2016 Apr;91(4):514-521. doi: 10.1016/j.mayocp.2016.02.017.
2. Nowakowski TJ1, Pollen AA1, Di Lullo E1, Sandoval-Espinosa C1, Bershteyn M1, Kriegstein AR2. Expression Analysis Highlights AXL as a Candidate Zika Virus Entry Receptor in Neural Stem Cells. *Cell Stem Cell.* 2016 Mar 28. pii: S1934-5909(16)00118-1. doi: 10.1016/j.stem.2016.03.012.

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