



Order: (888)-282-5810 (Phone)
(818)-707-0392 (Fax)
order@abiocode.com
Web: www.Abiocode.com

Zika M (N) Antibody, Rabbit Polyclonal

Cat#: R3771-3

Quantity: 100 ul

Predicted | Observed M.W.: 9 kDa

Lot#: Refer to vial

Application: WB

Uniprot ID: Q3Z2E1

Background:

The Zika virus (ZIKV) belongs to the *Flaviviridae* family of RNA viruses, and is related to the dengue, yellow fever, Japanese encephalitis, and West Nile viruses. Zika virus can be transmitted by mosquitoes. Like other flaviviruses, Zika virus is enveloped and has a nonsegmented, single-stranded, 10 kb positive-sense RNA genome. A positive-sense RNA genome can be directly translated into viral proteins. As in other flaviviruses, the RNA genome encodes seven nonstructural proteins (NS1, NS2A, NS2B, NS3 NS4A, NS4B and NS5), and three structural proteins (capsid protein C, membrane protein M and envelope protein E). One of the structural proteins, the flavivirus envelope glycoprotein E, encapsulates the virus; and it also binds to the endosomal membrane of the host cell to initiate endocytosis. The RNA genome forms a nucleocapsid along with copies of the 12-kDa capsid protein C. The nucleocapsid, in turn, is enveloped within a host-derived membrane modified with two viral glycoproteins. Viral genome replication depends on the making of double stranded RNA from the single stranded positive sense RNA [ssRNA(+)] genome, followed by transcription and replication to provide viral mRNAs and new ssRNA(+) genomes.

Zika virus precursor membrane protein prM can be cleaved by host furin to form secreted peptide Pr and membrane protein M. Protein prM assists the folding of E protein as a sort of chaperone and prevents premature fusion of the particles prior to be released from the infected cell, and the cleavage of prM into M protein also promotes the maturation of the viral particles. Zika virus membrane protein M is a multi-pass membrane protein.

Other Names:

Membrane protein M, Matrix protein, small envelope protein M

Source and Purity:

Rabbit polyclonal antibodies were produced by immunizing animals with a GST-fusion protein containing the N-terminal region of Zika virus (strain Mr 766) membrane protein M. Antibodies were purified by affinity purification using immunogen.

Storage Buffer and Condition:

Supplied in 1 x PBS (pH 7.4), 100 ug/ml BSA, 40% Glycerol, 0.01% NaN₃. Store at -20 °C. Stable for 6 months from date of receipt.

Species Specificity:

Zika virus

Tested Applications:

WB: 1:500-1:2,000 (detect endogenous protein*)

*: The apparent protein size on WB may be different from the calculated M.W. due to modifications.

Product Data:

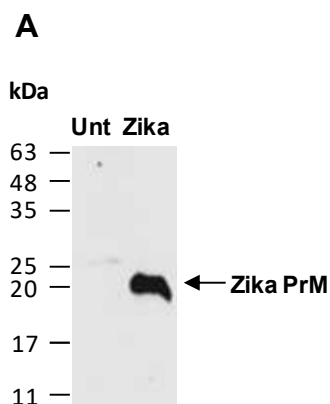


Fig 1. Western blot analysis of equal amounts of protein extracts from human lung epithelial A549 cells uninfected (unt) or infected with Zika virus (Zika), using anti-Zika M (N)(R3771-3) at RT for 2 h. Zika PrM protein detected by this antibody is a precursor protein that is cleaved to form secreted peptide Pr (11 kDa) and membrane protein M (9 kDa).