

## DESCRIPTION

|                           |                                                                                                                                                                                                                                                                             |
|---------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Species Reactivity</b> | Viral                                                                                                                                                                                                                                                                       |
| <b>Specificity</b>        | Detects Viral Zika Virus (H/PF/2013) NS1 in direct ELISAs.                                                                                                                                                                                                                  |
| <b>Source</b>             | Monoclonal Mouse IgG <sub>2B</sub> Clone # 990948                                                                                                                                                                                                                           |
| <b>Purification</b>       | Protein A or G purified from hybridoma culture supernatant                                                                                                                                                                                                                  |
| <b>Immunogen</b>          | Human embryonic kidney cell, HEK293-derived recombinant Viral Zika Virus (H/PF/2013) NS1 Val796 & Ser799-Ser1148, with a C-terminal 6-His tag<br>Accession # AHZ13508                                                                                                       |
| <b>Conjugate</b>          | Alexa Fluor 405<br>Excitation Wavelength: 405 nm<br>Emission Wavelength: 421 nm                                                                                                                                                                                             |
| <b>Formulation</b>        | Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide<br><br>*Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions. |

## APPLICATIONS

**Please Note:** Optimal dilutions should be determined by each laboratory for each application. [General Protocols](#) are available in the Technical Information section on our website.

**ELISA** Optimal dilution of this antibody should be experimentally determined.

## PREPARATION AND STORAGE

|                                |                                                                                                                   |
|--------------------------------|-------------------------------------------------------------------------------------------------------------------|
| <b>Shipping</b>                | The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below. |
| <b>Stability &amp; Storage</b> | Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied                          |

## BACKGROUND

Zika Virus non-structural protein 1 (ZIKV NS1) is an approximately 48 kDa viral glycoprotein (1). Zika Virus is a mosquito-borne flavivirus and has been implicated an association with neonatal microcephaly and neurological disorders such as Guillain-Barré syndrome (2). ZIKV strain H/PF/2013 was isolated from human host. ZIKV NS1 is a multifunctional virulence factor. The glycosylated NS1 exists as a membrane-associated dimer after translocation into the endoplasmic reticulum lumen, where it is essential for viral genome replication (1, 2). Infected cells secrete NS1 as a lipoprotein, which is involved in immune evasion and pathogenesis via interaction with components of the innate and adaptive immune systems (1, 2). Mature ZIKV NS1 contains 352 amino acids (aa) and has a hexameric conformation consisting of three dimers to form a symmetric barrel shape (1). It has high structural similarity to other flavivirus NS1 proteins, such as DENV and WNV (2, 3). Mature NS1 of ZIKV strain H/PF/2013 shares 98% aa sequence identity with NS1 of ZIKV strain MR 766 that was isolated from monkey host.

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