

DESCRIPTION

Species Reactivity	Viral
Specificity	Detects Zika Virus (H/PF/2013) Envelope (E3) in direct ELISAs.
Source	Monoclonal Mouse IgG _{2A} Clone # 990801
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant Zika Virus (H/PF/2013) Envelope Leu590-Ser695
Conjugate	Alexa Fluor 594 Excitation Wavelength: 590 nm Emission Wavelength: 617 nm
Formulation	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide *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.

Western Blot	Optimal dilution of this antibody should be experimentally determined.
ELISA	Optimal dilution of this antibody should be experimentally determined.

PREPARATION AND STORAGE

Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	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.

PRODUCT SPECIFIC NOTICES

This product is provided under an agreement between Life Technologies Corporation and R&D Systems, Inc, and the manufacture, use, sale or import of this product is subject to one or more US patents and corresponding non-US equivalents, owned by Life Technologies Corporation and its affiliates. The purchase of this product conveys to the buyer the non-transferable right to use the purchased amount of the product and components of the product only in research conducted by the buyer (whether the buyer is an academic or for-profit entity). The sale of this product is expressly conditioned on the buyer not using the product or its components (1) in manufacturing; (2) to provide a service, information, or data to an unaffiliated third party for payment; (3) for therapeutic, diagnostic or prophylactic purposes; (4) to resell, sell, or otherwise transfer this product or its components to any third party, or for any other commercial purpose. Life Technologies Corporation will not assert a claim against the buyer of the infringement of the above patents based on the manufacture, use or sale of a commercial product developed in research by the buyer in which this product or its components was employed, provided that neither this product nor any of its components was used in the manufacture of such product. For information on purchasing a license to this product for purposes other than research, contact Life Technologies Corporation, Cell Analysis Business Unit, Business Development, 29851 Willow Creek Road, Eugene, OR 97402, Tel: (541) 465-8300. Fax: (541) 335-0354.