

DESCRIPTION

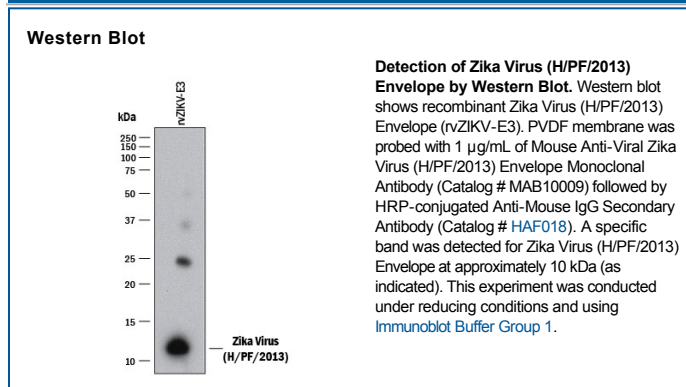
Species Reactivity	Viral
Specificity	Detects Zika Virus (H/PF/2013) Envelope (E3) in direct ELISAs.
Source	Monoclonal Mouse IgG _{2A} Clone # 990801
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant Zika Virus (H/PF/2013) Envelope Leu590-Ser695
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 µm filtered solution in PBS.

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.

	Recommended Concentration	Sample
Western Blot	1 µg/mL	See Below
ELISA	This antibody functions as an ELISA capture antibody when paired with Mouse Anti-Viral Zika Virus (H/PF/2013) Envelope Monoclonal Antibody (Catalog # MAB100091). <i>This product is intended for assay development on various assay platforms requiring antibody pairs.</i>	

DATA



PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.5 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> ● 12 months from date of receipt, -20 to -70 °C as supplied. ● 1 month, 2 to 8 °C under sterile conditions after reconstitution. ● 6 months, -20 to -70 °C under sterile conditions after reconstitution.

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.

References:

1. Song, H. et al. (2016) Nat. Struct. and Mol. Biol. **23**:456.
2. Brown, WC. et al. (2016) Nat. Struct. and Mol. Biol. **23**: 865.
3. Baronti, C. et al. (2014) Genome Announc. **2**: e00500