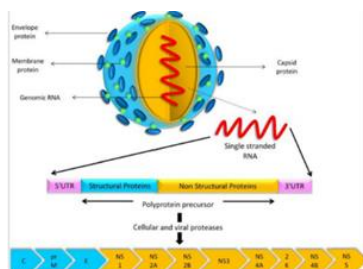


Product Data Sheet

- Cat# ZPRM11-S
 Cat# ZPRM11-C

Rabbit Anti-Zika Virus (E. coli) prM Protein antiserum
Zika Virus prM Protein (African) control for Western blot

Size:100 ul
Size:100 ul



Zika virus was first isolated in 1947 from a monkey in Zika forest in Uganda. Zika virus has been known to infect humans since and a serological survey in 1952 found 50 people out of 84 had developed antibodies. Zika then spread to many African and Asian countries. Since April 2015, a large, ongoing outbreak of Zika virus that began in Brazil has spread to much of South and Central America and the Caribbean. So far, only about a dozen people in the United States have been infected, mostly travelers from abroad. But the virus is expected to arrive in Florida, Texas, and other Southern states during the spring and summer mosquito season. For most people, Zika isn't very dangerous at all. Only 1 in 5 people (20%) show any symptoms whatsoever, and those usually involve a low-grade fever, sore body, headache, and sometimes a rash. Zika is causing an alarm because of its association with birth defects or microcephaly (small head or incomplete brain development) in newborn babies by mother-to-child transmission, as well as a stronger one with neurologic conditions in infected adults, including cases of Guillain-Barré syndrome (GBS CDC found Zika in the brains of two babies with microcephaly and evidence of Zika in two pregnancies that ended in miscarriage. CDC recently confirmed that Zika virus outbreak causes microcephaly in babies.

Zika virus (ZIKV) is a member of the virus family Flaviviridae and the genus *Flavivirus* (*flavus* means yellow), transmitted by daytime-active *Aedes* mosquitoes, such as *A. aegypti* and *A. albopictus*. Zika virus is related to the dengue, yellow fever, Japanese encephalitis, and West Nile viruses. Like other flaviviruses, Zika virus is enveloped and icosahedral and has a non-segmented, positive-sense ss-RNA genome. There are two lineages of the Zika virus: The African lineage, and the Asian lineage. Phylogenetic studies indicate that the virus spreading in the Americas is most closely related to the Asian strain. Effective **vaccines** for yellow fever virus, Japanese encephalitis, and tick-borne encephalitis have been developed but there are **no vaccines for Zika virus**.

Source of Antigen and Antibodies

Antigen	A peptide sequence corresponding to Zika virus prM Protein (African)
Ab Host/type	Rabbit, Polyclonal antiserum (Cat# ZPRM11-S). Supplied in 0.01% Sodium Azide as preservative.
2-Ab	Goat Anti-Rabbit IgG-HRP cat # 20320 (AP, biotin, FITC conjugates)
-ve control IgG	Cat# 20009-1, Rabbit (non-immune) IgG, purified, suitable for ELISA, Western, IHC as -ve control

Cat# ZPRM11-C, positive control

Recombinant Zika virus envelope protein was expressed in *E. coli* cells as his-tag fusion protein (full length, >95%, ~10 kDa). Purified glycoprotein for Western blot +ve control (Cat# ZPRM11-C) is supplied in SDS-PAGE sample buffer (reduced). Load 10 ul/lane of # ZPRM11-C for good visibility with antibody Cat # ZPRM11-S. Store at -20oC in suitable size aliquots. SDS may crystallize in cold conditions. It should be re-dissolved by warming before taking it from the stock. It should be heated once prior to loading on gels. If the product has been stored for several weeks, then it may be preferable to add 5 ul of fresh 2x sample buffer per 10 ul of the # ZPRM11-C solution prior to heating and loading on gels. This preparation is not

biologically active. It is not suitable for ELISA or other applications where native protein is required. Do not freeze, thaw, or heat repeatedly.

Form & Storage of Antibodies/Peptide Control

Antibody

- 100 ul solution lyophilized powder

Buffer: PBS+0.01% azide. **Reconstitute powder** 100 ul water

Storage

Short-term: unopened, undiluted vials for less than a week at 4oC.

Long-term: at -20°C or below in suitable aliquots after reconstitution. Do not freeze and thaw and store working, diluted solutions.

Stability: 6-12 months at -20oC or below.

Shipping: 4oC for solutions and room temp for powder.

Recommended Usage

Western Blotting: Purified ZPRM is ~10 kDa. Load ~100-200 ng/lane for good visibility with appropriate antibodies.

ELISA (1:10-50K; using 50-100 ng antigen/well).
Use ADI #ZPRM15-R-10.

Histochemistry & Immunofluorescence: not tested.

Specificity & Cross-reactivity

Zika virus PrM sequence share 61% similarity with Spondweni virus; 50-56% with dengue virus. Zika virus African strain and Brazilian strains are 99% conserved.

References: Malone, RW et al., PLOS Neglected Tropical Diseases 2016; 10 (3): e0004530; Sikka, V; et al., Journal of Global Infectious Diseases., 2016., 8 (1): 3-15; Petersen, EE., MMWR. Morbidity and mortality weekly report., 2016., 65 (12): 315-22.

*This product is for In vitro research use only.

http://www.4adi.com/objects/catalog/product/extras/Ebola_Marburg_Vaccines_ELISA_A_Flr.pdf

Catalog#	Prod Description
RV-403100-1	Recombinavirus™ Human Anti-Zika Virus (ZIKV) Envelop protein IgG ELISA kit
RV-403105-1	Recombinavirus™ Human Anti-Zika Virus (ZIKV) Envelop protein IgM ELISA kit
RV-403110-1	Recombinavirus™ Monkey Anti-Zika Virus (ZIKV) Envelop protein IgG ELISA kit
RV-403115-1	Recombinavirus™ Monkey Anti-Zika Virus (ZIKV) Envelop protein IgM ELISA kit
RV-403120-1	Recombinavirus™ Mouse Anti-Zika Virus (ZIKV) Envelop protein IgG ELISA kit
RV-403125-1	Recombinavirus™ Mouse Anti-Zika Virus (ZIKV) Envelop protein IgM ELISA kit
RV-403200-1	Recombinavirus™ Human Anti-Zika Virus (ZIKV) PrM protein IgG ELISA kit
RV-403205-1	Recombinavirus™ Human Anti-Zika Virus (ZIKV) PrM protein IgM ELISA kit
RV-403210-1	Recombinavirus™ Monkey Anti-Zika Virus (ZIKV) PrM protein IgG ELISA kit
RV-403215-1	Recombinavirus™ Monkey Anti-Zika Virus (ZIKV) PrM protein IgM ELISA kit
RV-403220-1	Recombinavirus™ Mouse Anti-Zika Virus (ZIKV) PrM protein IgG ELISA kit

ZPRM11-S-Zika-E.coli-PrM-protein

160503SV

India Contact:

Life Technologies (India) Pvt. Ltd.

306, Aggarwal City Mall, Opposite M2K Pitampura, Delhi - 110034 (INDIA). Ph: +91-11-42208000, 42208111, 42208222, Mobile: +91-9810521400, Fax: +91-11-42208444

Email: customerservice@lifetechindia.com Website: www.lifetechindia.com