

## Recombinant Zika Envelope Protein

**CATALOG NO:** P1063-10 10 µg  
P1063-50 50 µg

**SOURCE:** *E. coli*

**PURITY:** > 95% by SDS-PAGE

**FORM:** Liquid (Sterile Filtered solution)

**MOLECULAR WT:** The *E.coli* derived Recombinant Zika Envelope protein (250-410 a.a., Strain: ZikaSPH2015) having an molecular weight of 19kDa is designed with minimal level cross-reaction to other Flavivirus such as dengue and West Nile viruses. The Zika Envelope protein is fused to a 6xHis tag at C-terminus and purified by proprietary chromatographic technique.

**FORMULATION:** Zika Envelope protein solution contains PBS and 45 mM arginine.

**STORAGE CONDITIONS:** Zika Envelope protein although stable at 4°C for 1 week, should be stored below -18°C. Avoid freeze thaw cycles.

**DESCRIPTION** Zika virus (ZIKV) belongs to the family Flaviviridae and the genus Flavivirus, it is transmitted by daytime-active Aedes mosquitoes, such as *A. aegypti* and *A. albopictus*. The Zika virus is related to the dengue, yellow fever, Japanese encephalitis, and West Nile viruses. Much like the other flaviviruses, Zika virus is enveloped and icosahedral and has a non-segmented, single-stranded, positive-sense RNA genome. Zika fever is an infection, which often causes no symptoms or only mild ones, like a mild form of dengue fever, and it is treated by rest. As of February 2016, there has been mounting evidence that Zika fever in pregnant women can cause abnormal brain development in their fetuses by mother-to-child transmission, which may result in miscarriage or microcephaly, however it is not yet known whether Zika virus causes microcephaly. Furthermore, a connection has been established with neurologic conditions in infected adults, including Guillain–Barre syndrome. Since the 1950s, Zika virus has been detected only within a narrow equatorial belt from Africa to Asia. Between the years 2013 and 2014, Zika virus has spread eastward across the Pacific Ocean to French Polynesia, New Caledonia, the Cook Islands, and Easter Island, and in 2015 to Mexico, Central America, the Caribbean, and South America, where the Zika outbreak has reached pandemic levels.

### RELATED PRODUCT:

- Anti-Flavivirus group antigen, Human IgG1 Antibody (**Cat. No. A1102-100**)
- Human CellExp™ Zika virus NS1 Protein (**Cat. No. P1062-10**)
- Recombinant Zika virus NS1 Protein (**Cat. No. P1064-10, -50**)

**FOR RESEARCH USE ONLY! Not to be used on humans.**