Recombinant Chikungunya Virus E1

CATALOG NO: P1113-10 10 µg

SOURCE: Baculovirus (Insect Cells)

PURITY: > 95% by SDS-PAGE

FORM: Liquid (Sterile Filtered solution)

MOLECULAR WT: Recombinant Chikungunya Wild Type E1 produced in Insect Cells is a polypeptide chain containing amino acids 1-415 and having a molecular weight of approximately 50kDa.

FORMULATION: The Zika Ectodomain solution 10mM Sodium phosphate, pH 7.2, 150mM NaCl

STORAGE CONDITIONS: In 1x D-PBS, pH7.4, 0.1% Thimerosal, 5mM EDTA, 1µg/ml of Leupeptin, Aprotinin and Pepstatin A

DESCRIPTION

Chikungunya virus (CHIKV) is an arthropod-born virus which is a member of the Alphavirus genus belonging to the Togaviridae family. CHIKV nucleocapsid is comprised of a single-stranded plussense RNA genome of approximately 11.8 kb. The CHIKV virion envelope consists of a lipid bilayer derived from the plasma membrane from the host cell, multiple copies of 2 major virus encoded glycoproteins E1 and E2, and a small 6K peptide. Proteins E1 and E2 both have a molecular weight of roughly 50kDa and form a heterodimer anchored in the membrane. Chikungunya virus infection causes an illness with symptoms similar to those of the dengue fever with an acute febrile phase lasting only 2-5 days, followed by a prolonged arthralgic disease affecting the joint extremities. Recent Chikungunya virus outbreaks presented a prospect for genetic analysis of patients with the illness, revealing a point mutation at the amino acid 226 (Ala mutated to Val) of the E1 gene. This point mutation was confirmed to be responsible for an improved capacity of CHIKV strains to infect and replicate in the Aedes albopictus, enabling virus transmission to a naive human population.

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)**
- Recombinant Zika Envelope Protein **(P1063-10, -50)**
- Recombinant West Nile Virus Envelope Protein **(P1065-10, -50)**

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