

# Product Information

## Chikungunya Virus-like Particles (CHIKV VLPs)

Cat. No.: **VLP-011YF**

This product is for research use only and is not intended for diagnostic use.

Recombinant Chikungunya Virus-like Particles (CHIKV VLPs) are produced in mammalian HEK293 human cells, assembled with E1, E2 and capsid protein. VLP is mimicking the native 3D structure of viruses which can elicit strong immune responses. However, VLPs lack viral genomic material which makes them non-infectious, unable to replicate and enhance the safety during manufacture and administration. CHIKV VLPs can be used in the development of CHIKV diagnostics and in vaccine development and R&D (including use as an immunogen).

## Product Specifications

### Structural Proteins

E1, E2 and capsid protein

### Expression Systems

HEK293 (please specify if other expression system is needed)

### Purity

>90%

### Buffer

20 mM Tris-HCl (pH7.5), 125 mM NaCl, 20% (w/v) sucrose

### Form

Liquid

### Alternative Names

Chikungunya virus-like particle; Chikungunya virus; CHIKV VLP; CHIKV; CHIKV virus-like particle, virus like particle

### Storage

Store at -80 °C long term. Avoid repeated freeze/thaw cycles.

## Virus Background

### Virus Family

Togaviridae

### Virus Species

Chikungunya virus

### Virus Overview

Chikungunya virus (CHIKV), is a member of the genus Alphavirus, and family Togaviridae. It was first isolated in 1953 in Tanzania and is an RNA virus with a positive-sense single-stranded genome of about 11.6kb. It is a member of the Semliki Forest virus complex and is closely related to Ross River virus, O'nyong'nyong virus, and Semliki Forest virus.

Because it is transmitted by arthropods, namely mosquitoes, it can also be referred to as an arbovirus (arthropod-borne virus). Chikungunya virus (CHIKV) can cause Chikungunya infection. Symptoms include fever and joint pains. These typically occur two to twelve days after exposure. Other symptoms may include headache, muscle pain, joint swelling, and a rash.

**Virus Structure**

Enveloped, positive-sense, single-stranded RNA virus

**Related Disease**

Chikungunya infection