

Product Information

O'nyong'nyong Virus-like Particles (ONNV VLPs)

Cat. No.: **VLP-022YF**

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

Recombinant O'nyong'nyong Virus-like Particles (ONNV VLPs) are produced in mammalian HEK293 human cells, assembled with E1, E2 and Capsid proteins. 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. ONNV VLPs can be used in the development of ONNV diagnostics and in vaccine development and R&D (including use as an immunogen).

Product Specifications

Structural Proteins

E1, E2 and Capsid proteins

Expression Systems

HEK293 (please specify if other expression system is needed)

Purity

>90%

Buffer

20mM Tris-HCl pH8.0, 160mM NaCl

Form

Liquid

Alternative Names

O'nyong'nyong Virus-like Particles; ONNV VLPs; O'nyong'nyong Virus; ONNV Virus-like Particles; VLPs; Virus-like Particles

Storage

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

Virus Background

Virus Family

Togaviridae

Virus Species

O'nyong'nyong virus

Virus Overview

The ONNV genome is a positive-sense, single-stranded, nonsegmented RNA of ~11.7 kb which replicates exclusively in the cytoplasm of infected cells. Replication of alphavirus RNA occurs at intracellular membranes in infected cells and

leads to formation of dsRNA forms called replicative intermediates. The subgenomic (26S) mRNA is translated into a structural polyprotein from which capsid and envelope glycoproteins are produced as cleavage products; the capsid protein has protease activity which results in its autocatalytic cleavage from the nascent structural protein.

Virus Structure

Enveloped, positive-sense, single-stranded RNA virus

Related Disease

Polyarthritis, rash and fever.