## Fluorescent Virus-Like Particle (VLP) Protein Isotype Control

Catalog # VLP-NF2P4



### **Synonym**

VLP, Virus Like Particle, eVLP, VLPs

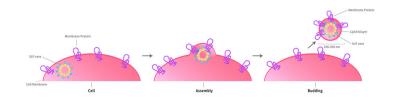
#### Source

Fluorescent Virus-Like Particle (VLP) Protein Isotype Control(VLP-NF2P4) is expressed from human 293 cells (HEK293).

#### **Molecular Characterization**

Fluorescent Virus-Like Particle (VLP) Protein Isotype Control (VLP-NF2P4) carries a GFP tag and is formed by self-assembly of envelop/capsid proteins from viruses, it can be used as isoytype control for Fluorescent VLPs displaying membrane proteins in various applications.

Virus-like particles(VLPs) are formed by self-assembly of envelop/capsid proteins from viruses. Membrane Proteins can be constituted in-situ with VLPs produced from HEK293 cell cultures. These VLPs concentrate conformationally intact membrane proteins directly on the cell surface and produce soluble, high-concentration proteins perfect for immunization and antibody screening.



The VLPs provide the display of properly folded membrane proteins in their native cellular membrane in a compact size of 100~300 nm diameter (similar to the size of most viruses) making it optimal targets for dendritic cells in vivo and surface attachment for phage display.

# Conjugate

**GFP** 

Excitation source: 488 nm spectral line, argon-ion laser

Excitation Wavelength: 488 nm

Emission Wavelength: 530 nm

## Endotoxin

Less than 1.0 EU per µg by the LAL method.

#### **Purity**

>90% as determined by SDS-PAGE.

#### Formulation

The VLPs are highly immunogenic, so the immunization strategy should be optimized (antigen dose, regimen and adjuvant).

Supplied as 0.2 µm filtered solution in PBS, pH7.4 with trehalose as protectant.

Contact us for customized product form or formulation.

#### **Shipping**

This product is supplied and shipped with dry ice, please inquire the shipping cost.

## **Storage**

Please protect from light and avoid repeated freeze-thaw cycles.

This product is stable after storage at:

- The product MUST be stored at -70°C or lower upon receipt;
- -70°C for 3 months under sterile conditions.

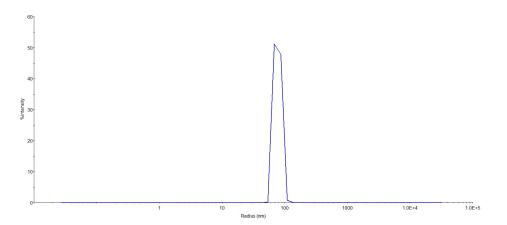
**Identity-DLS** 



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The mean peak Radius of VLP is 65-85 nm with more than 95% intensity as determined by dynamic light scattering (DLS).

# **Background**

Virus-like particles (VLPs) are highly structured protein particles composed of single or multiple structural proteins of the virus. Its morphological structure is similar to that of natural virus particles, does not contain virus accounting, and has strong immunogenicity and biological activity. The empty shell structure of most VLP is icosahedral or helical structure, which is composed of several specific structural proteins. At present, it is widely used in vaccine production and antigen presentation.

# **Clinical and Translational Updates**

