Synonym

VLP,Virus Like Particle,eVLP,VLPs

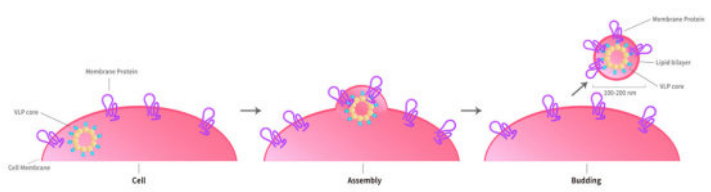
Source

Fluorescent VLP isotype control(VLP-NF2P4) is expressed from human 293 cells (HEK293).

Molecular Characterization

Fluorescent VLP 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. Membrance 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 as sterile liquid solution with dry ice, please inquire the shipping cost.

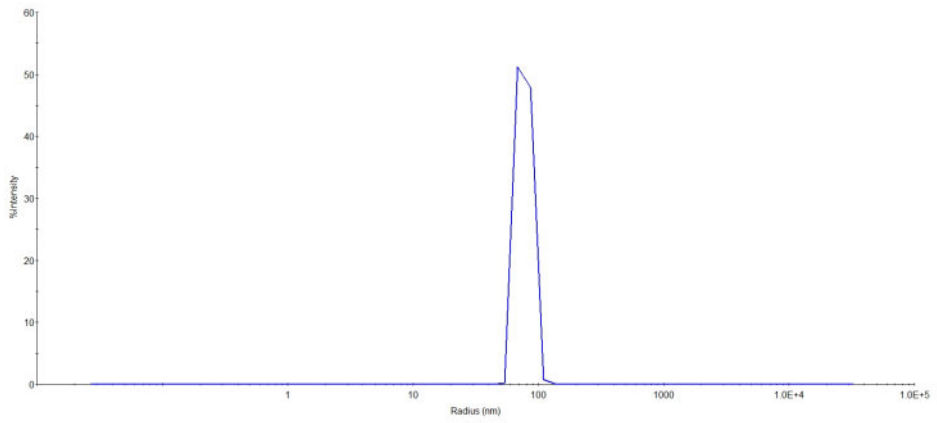
Storage

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



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

Please contact us via TechSupport@acrobiosystems.com if you have any question on this product.