

Synonym

Claudin-6,CLDN6

Source

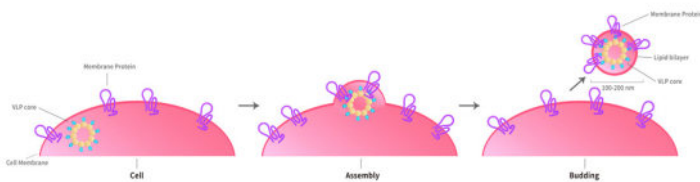
Fluorescent Human Claudin-6 Full Length Protein (VLP)(CL6-HF2G8) is expressed from human 293 cells (HEK293). It contains AA Met 1 - Val 220 (Accession # [P56747](#)).

Predicted N-terminus: Asp

Molecular Characterization

This protein carries a GFP tag

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.

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, Arginine, 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

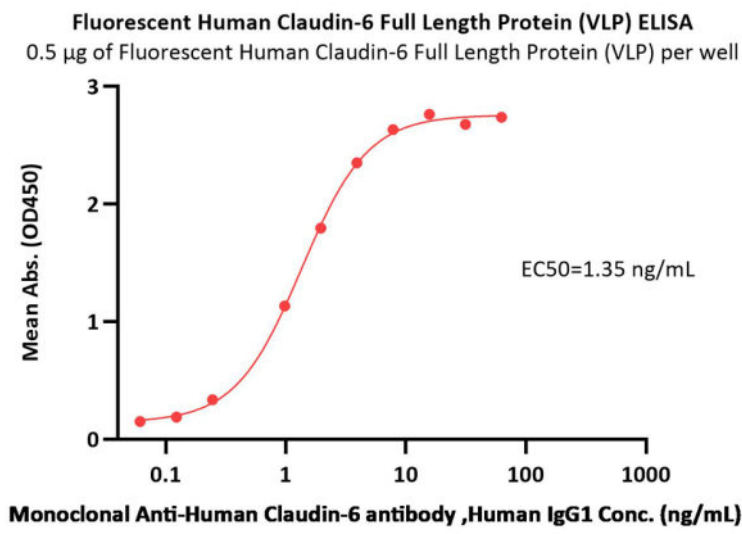
Please protect from light and avoid repeated freeze-thaw cycles.

This product is stable after storage at:

- The product MUST be stored at -70°C or lower upon receipt;
- -70°C for 12 months under sterile conditions.

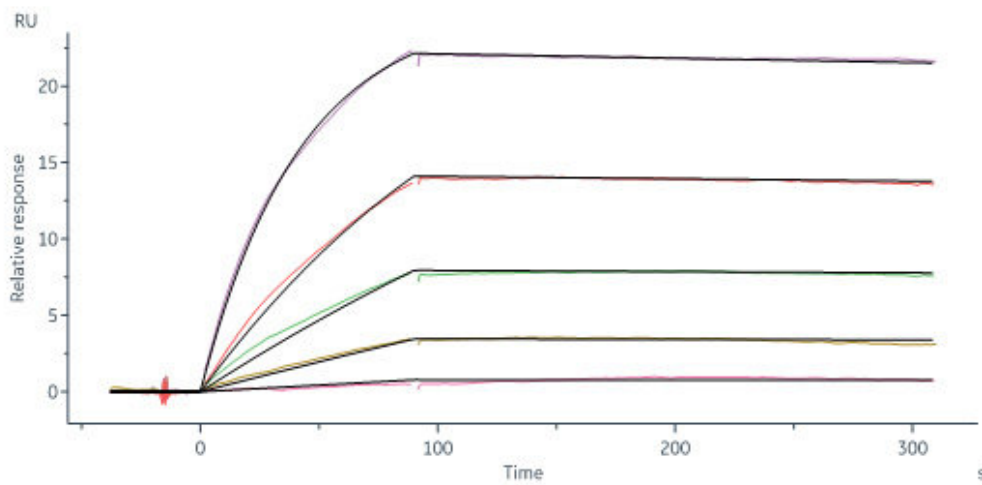
*The isotype control of empty/mock VLP (Cat. No. [VLP-NF2P4](#)) is sold separately and not included in protein, you can follow [this link](#) for product information.

Bioactivity-ELISA



Immobilized Fluorescent Human Claudin-6 Full Length Protein (VLP) (Cat. No. CL6-HF2G8) at 5 µg/mL (100 µL/well) can bind Monoclonal Anti-Human Claudin-6 antibody, Human IgG1 with a linear range of 0.1-4 ng/mL (QC tested).

Bioactivity-SPR



Fluorescent Human Claudin-6 Full Length Protein (VLP) (Cat. No. CL6-HF2G8) captured on L1 Chip can bind Anti-Claudin-6 Antibody, Human IgG1 with an affinity constant of 68.7 pM as determined in a SPR assay (Biacore 8K) (Routinely tested).

Background

Tight junctions represent one mode of cell-to-cell adhesion in epithelial or endothelial cell sheets, forming continuous seals around cells and serving as a physical barrier to prevent solutes and water from passing freely through the paracellular space. These junctions are comprised of sets of continuous networking strands in the outwardly facing cytoplasmic leaflet, with complementary grooves in the inwardly facing extracytoplasmic leaflet. Claudin-6, also known as CLDN6, is a multipass transmembrane protein in the Claudin family. Claudin-6 is expressed by epithelial cells where it participates in tissue development and the maintenance of tight junction integrity. And it is one of the entry cofactors for hepatitis C virus. The methylation of CLDN6 may be involved in esophageal tumorigenesis. The gene of CLDN6 is adjacent to another family member CLDN9 on chromosome 16.

Clinical and Translational Updates

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