

## Synonym

Claudin-6,CLDN6

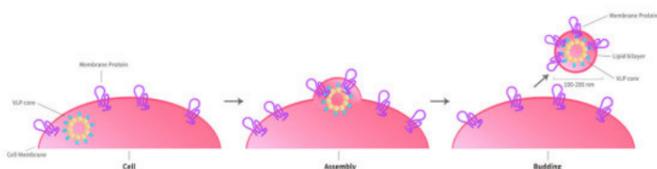
## Source

Human Claudin-6 Full Length Protein-VLP(CL6-HF2G5) is expressed from human 293 cells (HEK293). It contains AA Met 1 - Val 220 (Accession # [P56747](#)).

Predicted N-terminus: Asp

## Molecular Characterization

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.

## 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

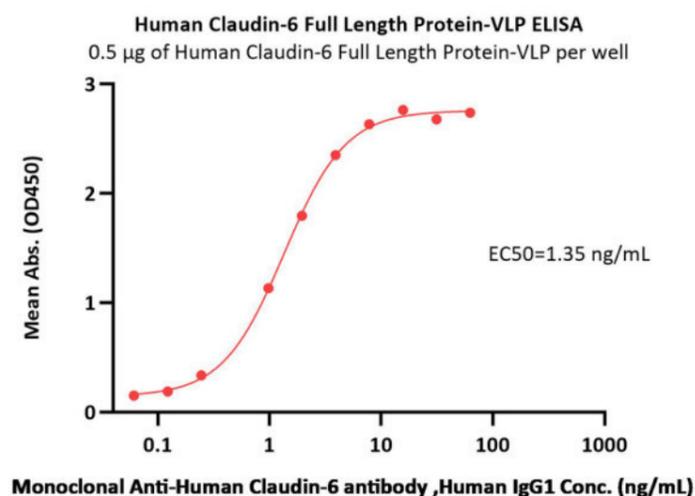
*Please avoid repeated freeze-thaw cycles.*

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.

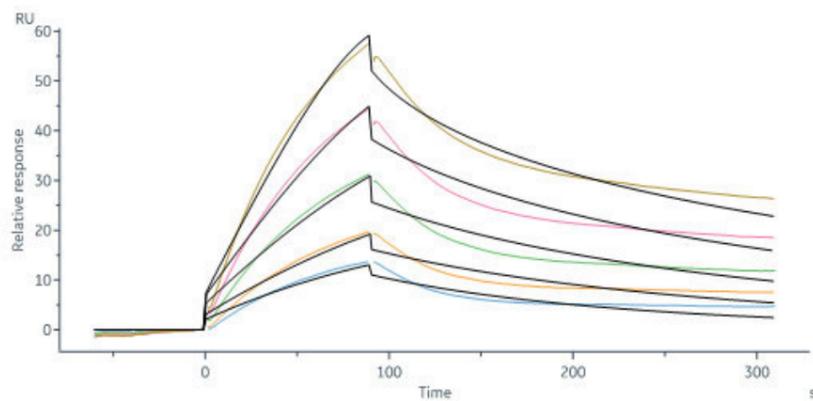
\*The isotype control of empty/mock VLP (Cat. No. [VLP-N5213](#)) is sold separately and not included in protein, you can follow [this link](#) for product information.

## Bioactivity-ELISA



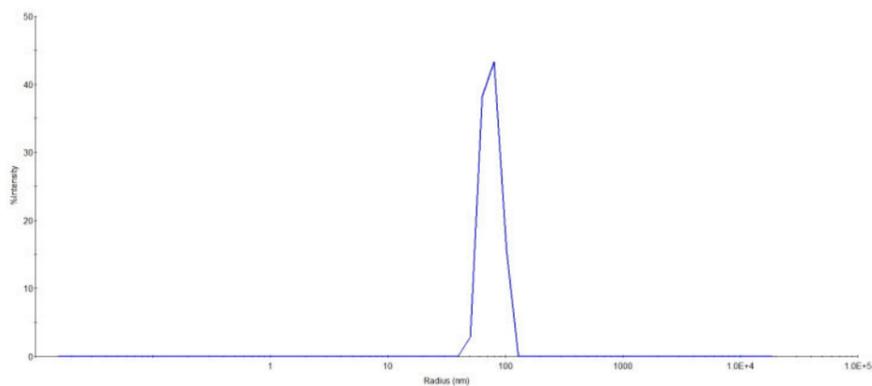
Immobilized Human Claudin-6 Full Length Protein-VLP (Cat. No. CL6-HF2G5) at 5 µg/mL (100 µL/well) can bind Monoclonal Anti-Human Claudin-6 antibody, Human IgG1 | Human Kappa with a linear range of 0.1-4 ng/mL (QC tested).

### Bioactivity-SPR



Human Claudin-6 Full Length Protein-VLP (Cat. No. CL6-HF2G5) captured on CM5 Chip via Anti-Claudin-6 Antibody, Human IgG1 can bind Anti-Claudin-6 Antibody, Human IgG1 with an affinity constant of 0.947 nM as determined in a SPR assay (Biacore 8K) (Routinely tested).

### Identity-DLS



The mean peak Radius of VLP is 60-80 nm with more than 95% intensity as determined by dynamic light scattering (DLS).

### 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](mailto:TechSupport@acrobiosystems.com) if you have any question on this product.