

Synonym

Claudin-18.1, CLDN18, Claudin-18

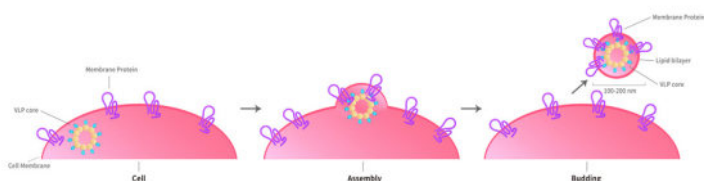
Source

Human Claudin-18.1 Full Length Protein (VLP)(CL1-H52P3) is expressed from human 293 cells (HEK293). It contains AA Met 1- Val 261 (Accession # [P56856-1](#)).

Predicted N-terminus: Met 1

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

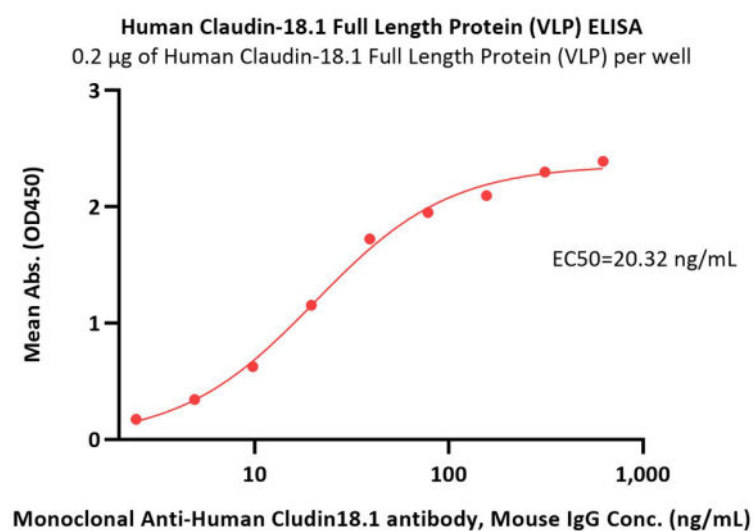
Please avoid repeated freeze-thaw cycles.

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.

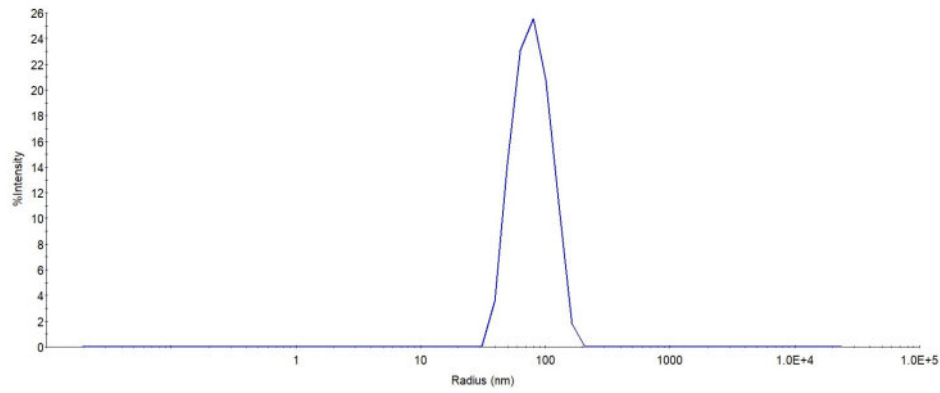
*The isotype control of empty/mock VLP (Cat. No. [VLP-N5213](#)) is sold separately and not included in protein, you can follow [this link](#) for product information.

Bioactivity-ELISA



Immobilized Human Claudin-18.1 Full Length Protein (VLP) (Cat. No. CL1-H52P3) at 2 µg/mL (100 µL/well) can bind Monoclonal Anti-Human Claudin18.1 antibody, Mouse IgG with a linear range of 2-78 ng/mL (QC tested).

Identity-DLS



The mean peak Radius of VLP is 75-95 nm with more than 95% intensity as determined by dynamic light scattering (DLS).

Background

This gene encodes a member of the claudin family. Claudins are integral membrane proteins and components of tight junction strands. Tight junction strands serve as a physical barrier to prevent solutes and water from passing freely through the paracellular space between epithelial or endothelial cell sheets, and also play critical roles in maintaining cell polarity and signal transductions. This gene is upregulated in patients with ulcerative colitis and highly overexpressed in infiltrating ductal adenocarcinomas. PKC/MAPK/AP-1 (protein kinase C/mitogen-activated protein kinase/activator protein-1) dependent pathway regulates the expression of this gene in gastric cells. Alternatively spliced transcript variants encoding different isoforms have been identified. [provided by RefSeq, Jun 2010]

Clinical and Translational Updates

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