Synonym

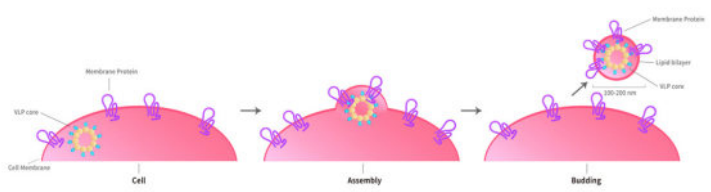
CLDN4,claudin 4

Source

Human Claudin-4 Full Length Protein (VLP)(CL4-H52P5) is expressed from human 293 cells (HEK293). It contains AA Met 1- Val 209 (Accession # O14493-1).
Predicted N-terminus: Met

Molecular Characterization

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.

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

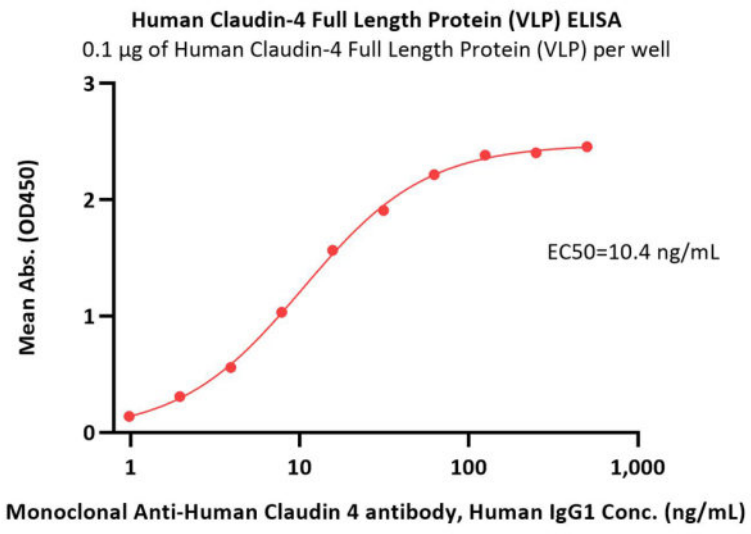
Please avoid repeated freeze-thaw cycles.

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-4 Full Length Protein (VLP) (Cat. No. CL4-H52P5) at 1 μg/mL (100 μL/well) can bind Monoclonal Anti-Human Claudin 4 antibody, Human IgG1 with a linear range of 1-63 ng/mL (QC tested).

Background

The protein encoded by this intronless gene belongs to the claudin family. Claudins are integral membrane proteins that are components of the epithelial cell tight junctions, which regulate movement of solutes and ions through the paracellular space. This protein is a high-affinity receptor for Clostridium perfringens enterotoxin (CPE) and may play a role in internal organ development and function during pre- and postnatal life. This gene is deleted in Williams-Beuren syndrome, a neurodevelopmental disorder affecting multiple systems.

Clinical and Translational Updates

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