

Synonym

Claudin-6,CLDN6

Source

Human Claudin-6 Protein, His, Twin-Strep Tag(CL6-H5289) is expressed from Baculovirus-Insect cells. It contains AA Ala 2 - Val 220 (Accession # <u>P56747-1</u>). Predicted N-terminus: Met

Molecular Characterization

Poly-his Claudin-6(Ala 2 - Val 220) P56747-1 Twin-Strep

This protein carries a polyhistidine tag at the N-terminus and a twin strep tag at the C-terminus.

The protein has a calculated MW of 28.3 kDa. The protein migrates as 26-27 kDa when calibrated against <u>Star Ribbon Pre-stained Protein Marker</u> under reducing (R) condition (SDS-PAGE).

Endotoxin

Less than 1.0 EU per µg by the LAL method / rFC method.

Purity

>80% as determined by SDS-PAGE.

Formulation

This product is not suitable for cell based experiments due to cytotoxicity of DDM.

DDM and CHS are INDISPENSABLE to keep membrane protein soluble and active, under no circumastance should you remove DDM and CHS.

DDM/CHS buffer (DC-11) is sold separately and not included in protein, and please contact us if you need the buffer.

If glycerol is not compatible to your application, remove glycerol just before immediate experiment, and NEVER store glycerol-free protein solution.

Supplied as 0.2 μ m filtered solution in 50 mM HEPES, 150 mM NaCl, DDM, CHS, pH7.5 with glycerol as protectant.

Contact us for customized product form or formulation.

Shipping

This product is supplied and shipped with dry ice, please inquire the shipping cost.

Storage

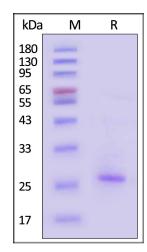
Please avoid repeated freeze-thaw cycles.

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 DDM/CHS buffer (Cat. No. <u>DC-11</u>) is sold separately and not included in protein, you can follow <u>this link</u> for product information.

SDS-PAGE

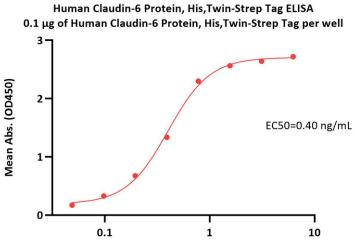


Human Claudin-6 Protein, His, Twin-Strep Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 80% (With <u>Star Ribbon Pre-stained Protein Marker</u>).

Bioactivity-ELISA



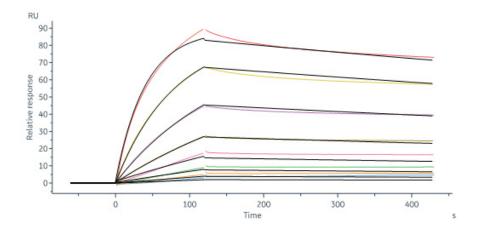




Monoclonal Anti-Human Claudin-6 antibody, Human IgG1 | Human Kappa Conc. (ng/mL)

Immobilized Human Claudin-6 Protein, His, Twin-Strep Tag (Cat. No. CL6-H5289) at 1 μ g/mL (100 μ L/well) can bind Monoclonal Anti-Human Claudin-6 antibody, Human IgG1 | Human Kappa with a linear range of 0.1-1 ng/mL (QC tested).

Bioactivity-SPR



Anti-Claudin-6 Antibody, Human IgG1 captured on Protein A Chip can bind Human Claudin-6 Protein, His, Twin-Strep Tag (Cat. No. CL6-H5289) with an affinity constant of 4.95 nM 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 knows 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.

