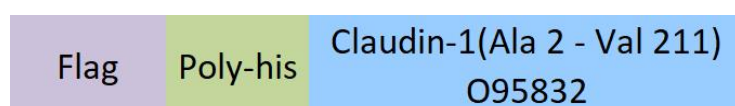


Synonym

CLD1, ILVASC, SEMP1

Source

Human Claudin-1 Protein, Flag,His Tag(CL1-H55D8) is expressed from Baculovirus-Insect cells. It contains AA Ala 2 - Val 211 (Accession # [O95832](#)).
Predicted N-terminus: Met

Molecular Characterization

This protein carries a flag tag at the N-terminus, followed by a polyhistidine tag

The protein has a calculated MW of 25.8 kDa. The protein migrates as 8 kDa, 10 kDa, 20 kDa and 22-23 kDa when calibrated against [Star Ribbon Pre-stained Protein Marker](#) under reducing (R) condition (SDS-PAGE).

Endotoxin

Less than 1.0 EU per µg by the LAL method.

Purity

>90% 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 circumstance 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 µm 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.

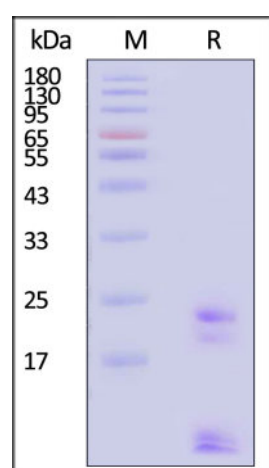
Storage

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

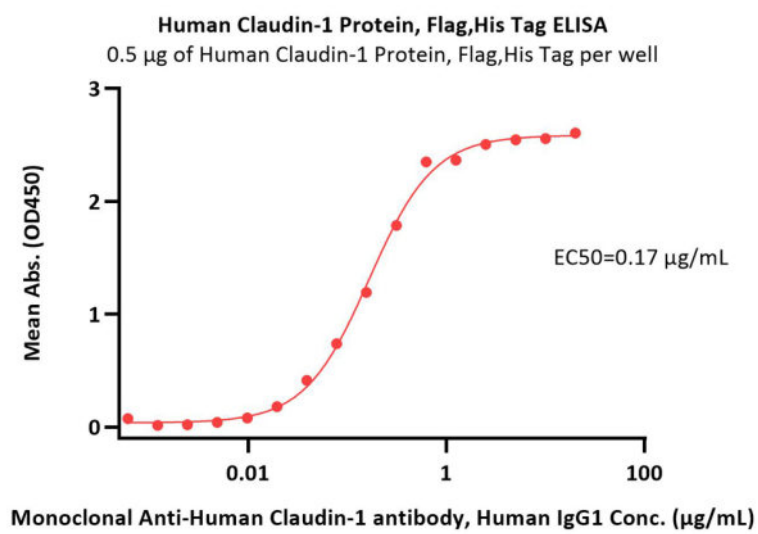
- The product MUST be stored at -70°C or lower upon receipt;
- -70°C for 12 months under sterile conditions.

**The DDM/CHS buffer (Cat. No. [DC-11](#)) is sold separately and not included in protein, you can follow [this link](#) for product information.

SDS-PAGE

Human Claudin-1 Protein, Flag,His Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 90% (With [Star Ribbon Pre-stained Protein Marker](#)).

Bioactivity-ELISA



Immobilized Human Claudin-1 Protein, Flag,His Tag (Cat. No. CL1-H55D8) at 5 µg/mL (100 µL/well) on a Nickel Coated plate (Cat. No. SP-16) can bind Monoclonal Anti-Human Claudin-1 antibody, Human IgG1 with a linear range of 0.001-0.625 µg/mL (QC 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. The protein encoded by this gene, a member of the claudin family, is an integral membrane protein and a component of tight junction strands. Loss of function mutations result in neonatal ichthyosis-sclerosing cholangitis syndrome. [provided by RefSeq, Jul 2008]

Clinical and Translational Updates

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