Human Claudin-3 Full Length Protein, His,Twin-Strep Tag (Detergent)

Catalog # CL3-H5583

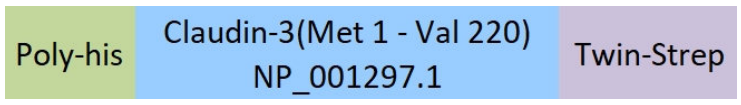
Synonym

C7orf1, CPE-R2, CPETR2, HRVP1, RVP1

Source

Human Claudin-3 Full Length Protein, His,Twin-Strep Tag(CL3-H5583) is expressed from Baculovirus-Insect cells. It contains AA Met 1 - Val 220 (Accession # NP_001297.1).
Predicted N-terminus: Met

Molecular Characterization



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 28.7 kDa. The protein migrates as 27-28 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 detergent.
Detergent buffer is INDISPENSABLE to keep membrane protein soluble and active, under no circumstance should you remove detergent.
Detergent buffer 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, Buffer B, 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

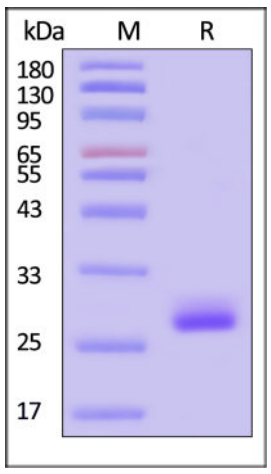
Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

- The product MUST be stored at -70°C or lower upon receipt;
- -70°C for 3 months under sterile conditions.

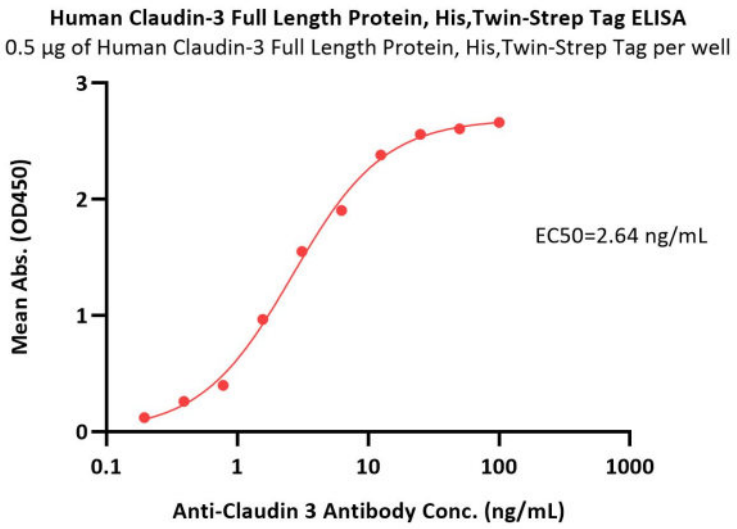
*The detergent Buffer B (Cat. No. LG-13) is sold separately and not included in protein, you can follow this link for product information.

SDS-PAGE



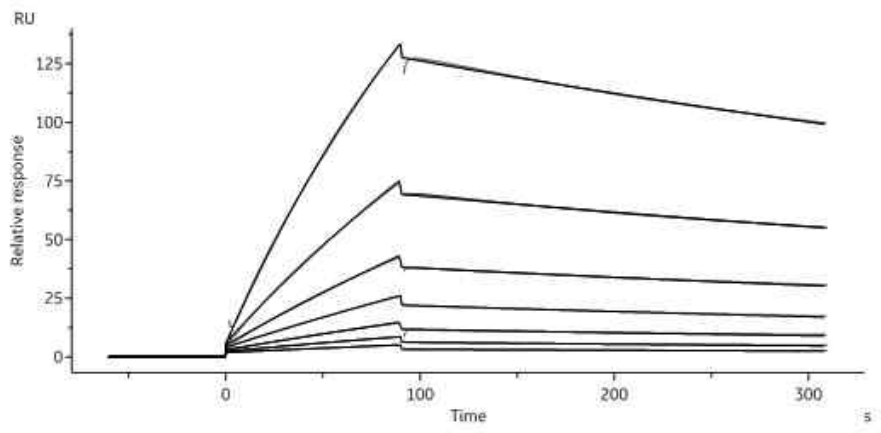
Human Claudin-3 Full Length Protein, His,Twin-Strep Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 90% (With Star Ribbon Pre-stained Protein Marker).

Bioactivity-ELISA



Immobilized Human Claudin-3 Full Length Protein, His,Twin-Strep Tag (Cat. No. CL3-H5583) at 5 μg/mL (100 μL/well) on a Nickel Coated plate (Cat. No. SP-19) can bind Anti-Claudin 3 Antibody with a linear range of 0.2-13 ng/mL (QC tested).

Bioactivity-SPR



Anti-Claudin 3 Antibody captured on Protein A Chip can bind Human Claudin-3 Full Length Protein, His,Twin-Strep Tag (Cat. No. CL3-H5583) with an affinity constant of 161 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. The protein encoded by this intronless gene, a member of the claudin family, is an integral membrane protein and a component of tight junction strands. It is also a low-affinity receptor for Clostridium perfringens enterotoxin, and shares aa sequence similarity with a putative apoptosis-related protein found in rat.

Clinical and Translational Updates