

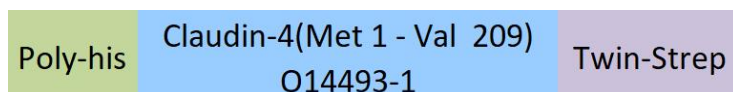
Synonym

CLDN4,claudin 4

Source

Human Claudin-4 Protein, His,Twin-Strep Tag(CL4-H5587) is expressed from Baculovirus-Insect cells. It contains AA Met 1 - Val 209 (Accession # [O14493-1](#)).

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 27.5 kDa. The protein migrates as 25-27 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 Tris, 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 as sterile liquid solution with dry ice, please inquire the shipping cost.

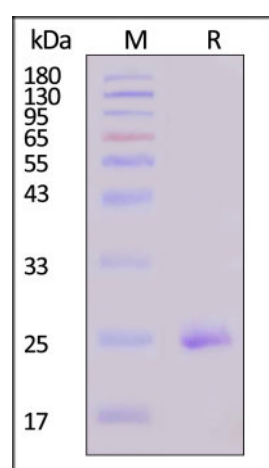
Storage

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

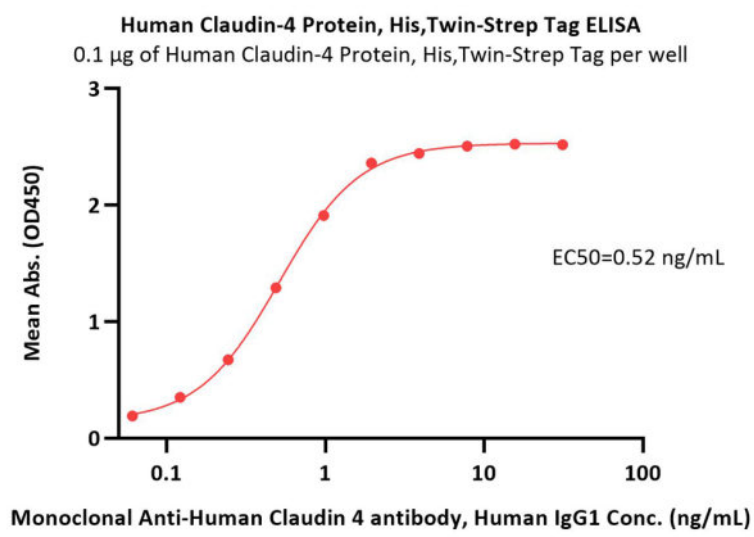
- The product MUST be stored at -70°C or lower upon receipt;
- -70°C for 12 months under sterile conditions.

**The 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

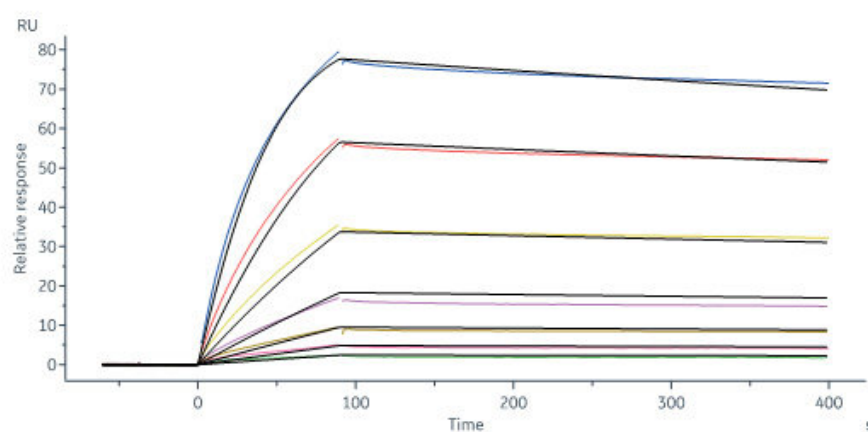
Human Claudin-4 Protein, His,Twin-Strep Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 90% (With [Star Ribbon Pre-stained Protein Marker](#)).

Bioactivity-ELISA



Immobilized Human Claudin-4 Protein, His,Twin-Strep Tag (Cat. No. CL4-H5587) at 1 µg/mL (100 µL/well) can bind Monoclonal Anti-Human Claudin 4 antibody, Human IgG1 with a linear range of 0.1-2 ng/mL (QC tested).

Bioactivity-SPR



Human Anti-CLDN4 antibody-xi5A5, Human IgG1 captured on Protein A Chip can bind Human Claudin-4 Protein, His,Twin-Strep Tag (Cat. No. CL4-H5587) with an affinity constant of 2.77 nM as determined in a SPR assay (Biacore 8K) (Routinely 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.