

Synonym

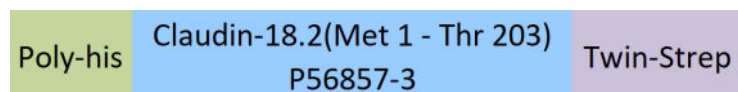
Claudin-18.2,CLDN18,Claudin-18

Source

Mouse Claudin-18.2, His,Twin-Strep Tag(CL2-M5585) is expressed from Baculovirus-Insect cells. It contains AA Met 1 - Thr 203 (Accession # [P56857-3](#)).

Predicted N-terminus: His

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 26.7 kDa. The protein migrates as 40 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

Endotoxin

Less than 1.0 EU per µg by the LAL 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 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 as sterile liquid solution with dry ice, please inquire the shipping cost.

Storage

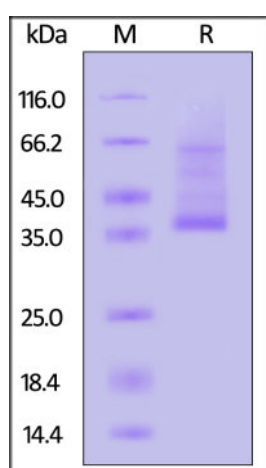
Please avoid repeated freeze-thaw cycles.

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.

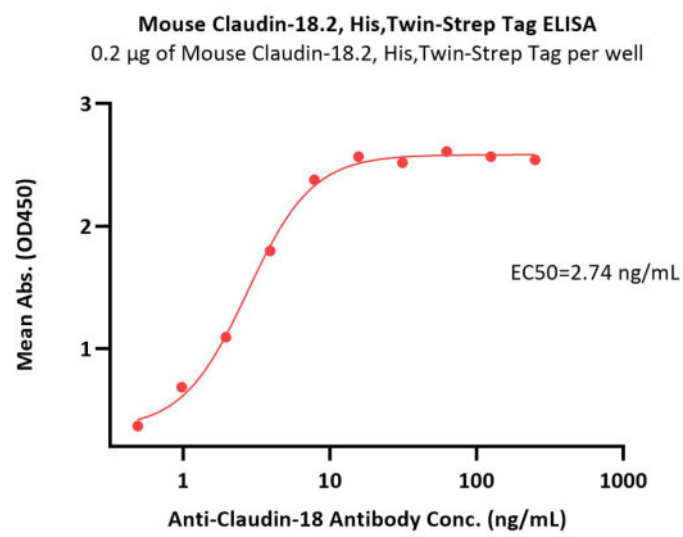
**The DDM/CHS buffer (Cat. No. [DC-11](#)) is sold separately and not included in protein, you can follow [this link](#) for product information.

SDS-PAGE



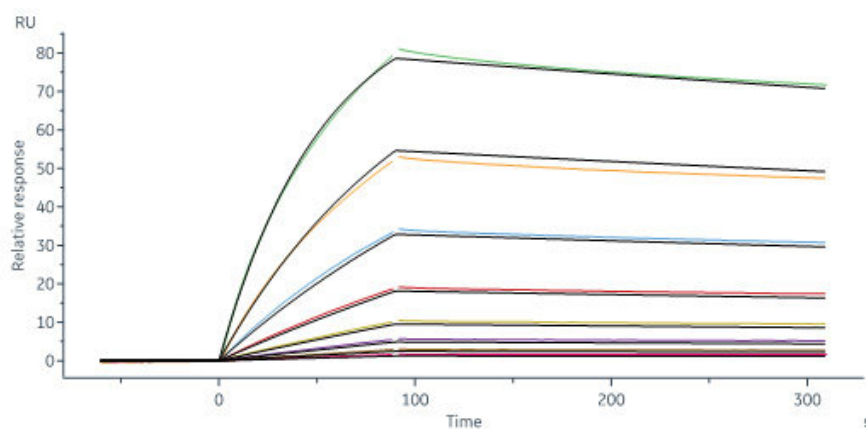
Mouse Claudin-18.2, His,Twin-Strep Tag on SDS-PAGE under reducing (R) condition. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 80%.

Bioactivity-ELISA



Immobilized Mouse Claudin-18.2, His,Twin-Strep Tag (Cat. No. CL2-M5585) at 2 µg/mL (100 µL/well) can bind Anti-Claudin-18 Antibody with a linear range of 0.2-31 ng/mL (QC tested).

Bioactivity-SPR



Claudin-18.1 Monoclonal Antibody captured on CM5 chip via anti-mouse antibodies surface can bind Mouse Claudin-18.2, His,Twin-Strep Tag (Cat. No. CL2-M5585) with an affinity constant of 13 nM as determined in a SPR assay (in presence of DDM and CHS) (Biacore 8K) (Routinely tested).

Background

Claudins (CLDNs) are a family of proteins that form tight junctions and maintain the polarity of epithelial and endothelial cells. CLDN18 is specifically expressed in the stomach and lung. Of the two CLDN18 isoform transcripts produced by alternative splicing, CLDN18.2 is a highly selective gastric lineage marker that determines the gastric phenotype in a neoplastic condition, whereas CLDN18.1 is lung specific. CLDN18.2 is a highly selective gastric lineage antigen expressed exclusively on short-lived differentiated gastric epithelial cells where it has only limited accessibility to antibody drugs.^{14,15} CLDN18.2 is maintained during the course of malignant transformation and thus frequently displayed on the surface of human gastric cancer cells.

Clinical and Translational Updates

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