

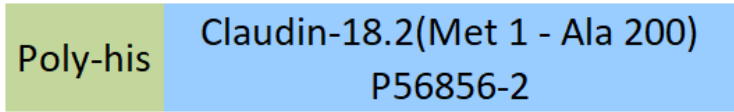
Synonym

Claudin-18.2,CLDN18,Claudin-18

Source

Human Claudin-18.2, His Tag (CL2-H5546) is expressed from Baculovirus-Insect cells. It contains AA Met 1 - Ala 200 (Accession # [P56856-2](#)).  
Predicted N-terminus: His

Molecular Characterization



This protein carries a polyhistidine tag at the N-terminus. The protein has a calculated MW of 23.0 kDa.

*It is produced as active membrane protein with full ECD epitopes, and contains both the ECL1 and ECL2.*

Endotoxin

Less than 1.0 EU per µg by the LAL method.

Purity

>60% as determined by SDS-PAGE.

Formulation

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

*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.*

Contact us for customized product form or formulation.

Storage

*Please avoid repeated freeze-thaw cycles.*

This product is stable after storage at:

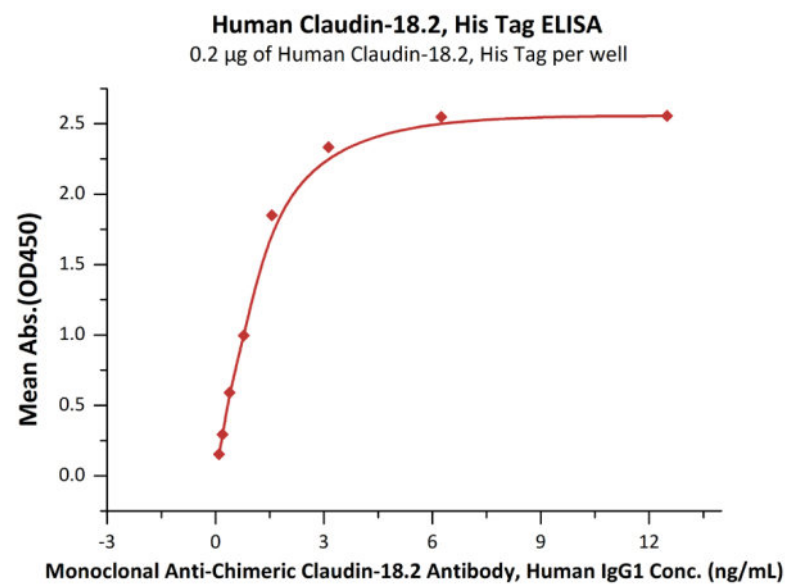
- The product MUST be stored at -70°C or lower upon receipt;
- -70°C for 3 months under sterile conditions.

Shipping

*This product is supplied and shipped as sterile liquid solution with dry ice, please inquire the shipping cost.*

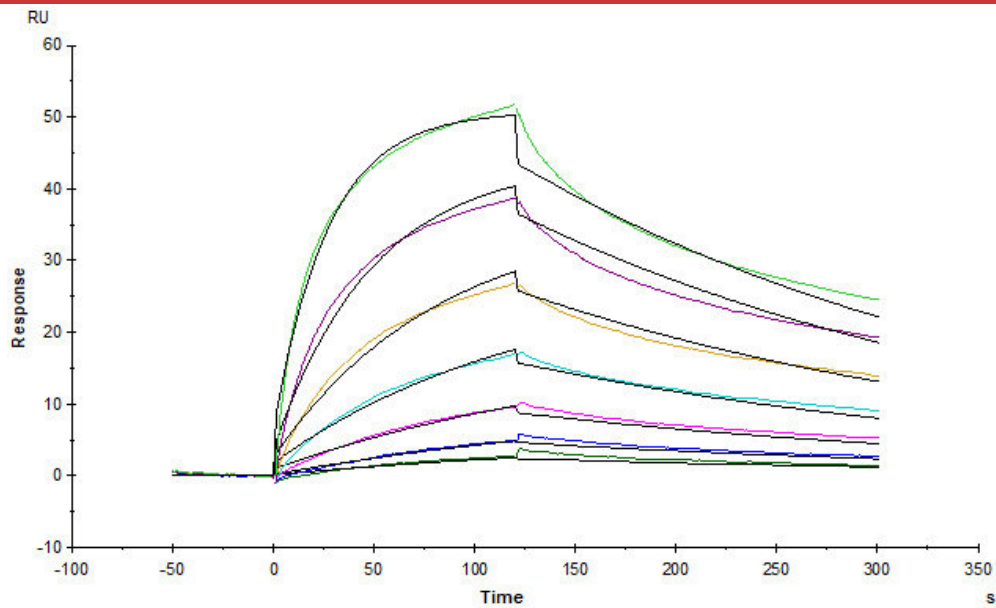
\*The DDM/CHS buffer (Cat. No. [DC-11](#)) is sold separately and not included in protein, you can follow [this link](#) for product information.

Bioactivity-ELISA



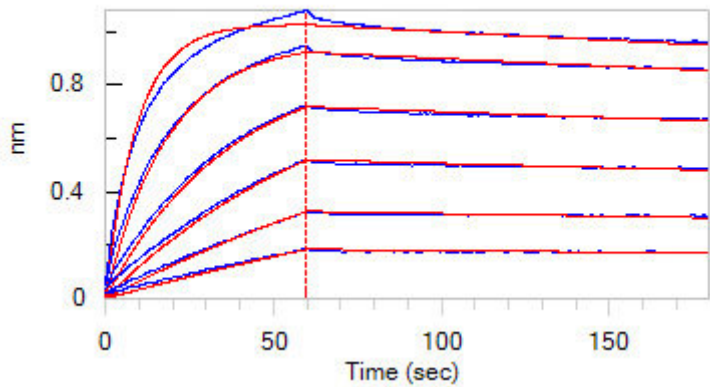
Immobilized Human Claudin-18.2, His Tag (Cat. No. [CL2-H5546](#)) at 2 µg/mL (100 µL/well) on an Nickel Coated plate can bind Monoclonal Anti-Chimeric Claudin-18.2 Antibody, Human IgG1 with a linear range of 0.4-2 ng/mL (in presence of DDM and CHS) (QC tested).

Bioactivity-SPR



Human Claudin-18.2, His Tag (Cat. No. CL2-H5546) captured on CM5 chip via anti-His antibody can bind Monoclonal Anti-Chimeric Claudin-18.2 Antibody, Human IgG1 with an affinity constant of 3.55 nM as determined in a SPR assay (in presence of DDM and CHS) (Biacore T200) (Routinely tested).

Bioactivity-BLI



Loaded Monoclonal Anti-Chimeric Claudin-18.2 Antibody, Human IgG1 on AHC Biosensor, can bind Human Claudin-18.2, His Tag (Cat. No. CL2-H5546) with an affinity constant of 1.55 nM as determined in BLI assay (ForteBio Octet Red96e) (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.<sup>14,15</sup> 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](mailto:TechSupport@acrobiosystems.com) if you have any question on this product.