

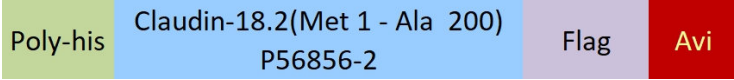
Synonym

Claudin-18.2, CLDN18, Claudin-18

Source

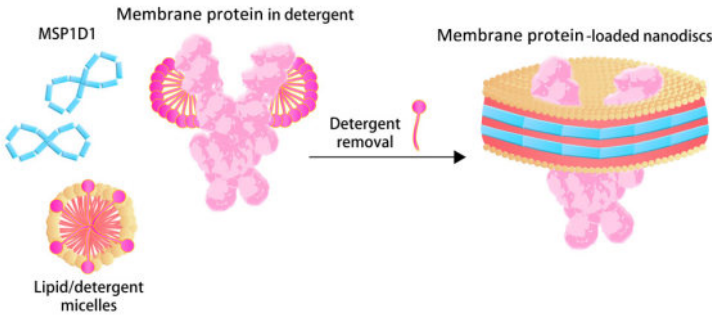
Biotinylated Human Claudin-18.2 Protein, His,Avitag&Flag Tag(CL2-H85D4) is expressed from Baculovirus-Insect cells. It contains AA Met 1 - Ala 200 (Accession # [P56856-2](#)).
Predicted N-terminus: Met

Molecular Characterization



This protein carries a polyhistidine tag at the N-terminus and a Flag tag at the C-terminus followed by an Avi tag (Avitag™). The protein has a calculated MW of 26.8 kDa.

Nanodiscs are a new class of model membranes that are being used to solubilize and study a range of integral membrane proteins and membrane-associated proteins. The Nanodisc bilayer is bounded by an amphipathic scaffold coat that confers enhanced stability and a narrow particle size distribution.



The nanodisc assembles from a mixture of full length membrane protein in detergent, phospholipid micelles and membrane scaffold protein upon removal of the detergent.

Labeling

Biotinylation of this product is performed using Avitag™ technology. Briefly, the single lysine residue in the Avitag is enzymatically labeled with biotin.

Protein Ratio

Passed as determined by the HABA assay / binding ELISA.
*The isotype control of empty/mock nanodisc (Cat. No. [APO-H81Q5](#)) is sold separately and not included in protein, you can follow [this link](#) for product information.

Formulation

Supplied as 0.2 µm filtered solution in 20 mM HEPES, 150 mM NaCl, pH7.5 with trehalose 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

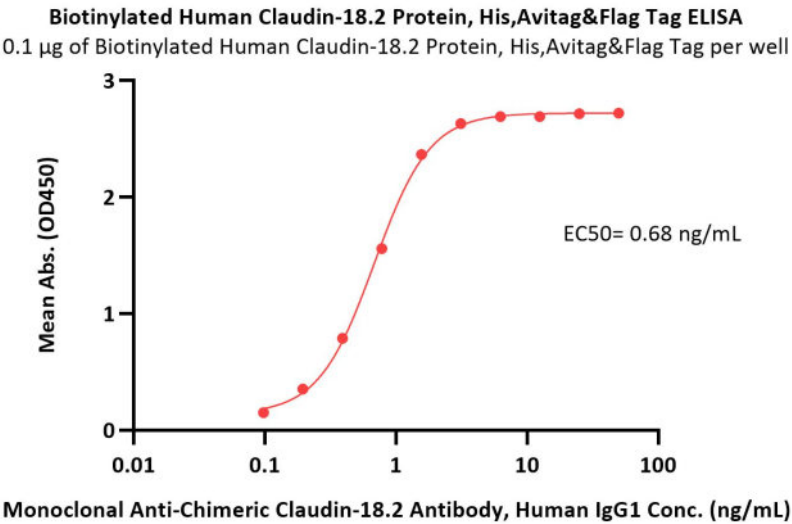
Please avoid repeated freeze-thaw cycles.

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.

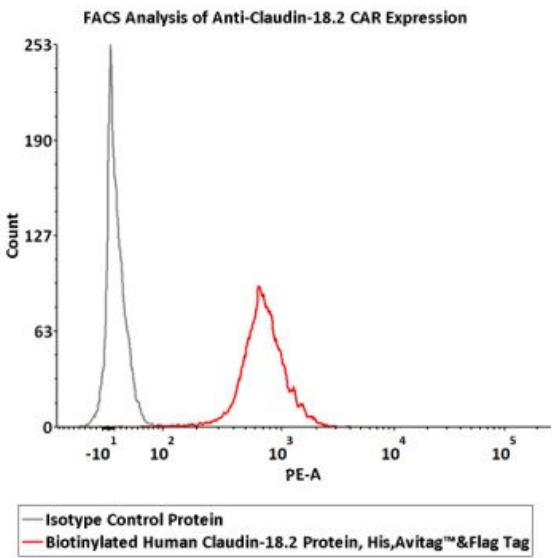
Bioactivity-ELISA





Immobilized Biotinylated Human Claudin-18.2 Protein, His,Avitag&Flag Tag (Cat. No. CL2-H85D4) at 1 µg/mL (100 µL/well) on streptavidin (Cat. No. STN-N5116) precoated (0.5 µg/well) plate can bind Monoclonal Anti-Chimeric Claudin-18.2 Antibody, Human IgG1 with a linear range of 0.1-2 ng/mL (QC tested).

Bioactivity-FACS



2e5 of Anti-Claudin18.2 CAR-293 cells were stained with 100 µL of 1 µg/mL Biotinylated Human Claudin-18.2 Protein, His,Avitag™&Flag Tag (Nanodisc) (Cat. No. CL2-H85D4) and isotype control protein respectively, washed and then followed by PE-SA and analyzed with FACS (QC 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.

