# Biotinylated Human Claudin-18.2 Protein, His,Avitag™&Flag Tag (Detergent)

Catalog # CL2-H85D3



### **Synonym**

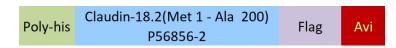
Claudin-18.2, CLDN18, Claudin-18

### Source

Biotinylated Human Claudin-18.2 Protein, His, Avitag&Flag Tag(CL2-H85D3) is expressed from Baculovirus-Insect cells. It contains AA Met 1 - Ala 200 (Accession # P56856-2).

Predicted N-terminus: Met

## **Molecular Characterization**



The protein has a calculated MW of 26.8 kDa. The protein migrates as 25 kDa,40 kDa and 43-80 kDa when calibrated against <u>Star Ribbon Pre-stained</u> <u>Protein Marker</u> under reducing (R) condition (SDS-PAGE).

### Labeling

Biotinylation of this product is performed using Avitag<sup>TM</sup> 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.

## 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 circumastance 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  $0.2 \mu m$  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 with dry ice, please inquire the shipping cost.

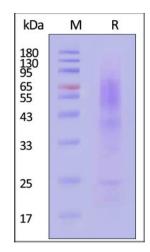
### **Storage**

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.

### **SDS-PAGE**



Biotinylated Human Claudin-18.2 Protein, His, Avitag&Flag 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 <u>Star Ribbon Pre-stained Protein Marker</u>).

**Bioactivity-ELISA** 



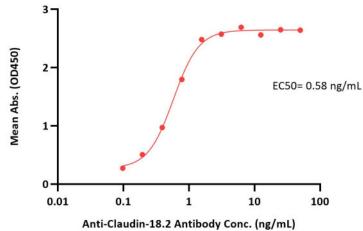
<sup>\*\*</sup>The DDM/CHS buffer (Cat. No. DC-11) is sold separately and not included in protein, you can follow this link for product information.

# Biotinylated Human Claudin-18.2 Protein, His,Avitag™&Flag Tag (Detergent)





Biotinylated Human Claudin-18.2 Protein, His,Avitag&Flag Tag ELISA 0.1  $\mu$ g of Biotinylated Human Claudin-18.2 Protein, His,Avitag&Flag Tag per well



Immobilized Biotinylated Human Claudin-18.2 Protein, His,Avitag&Flag Tag (Cat. No. CL2-H85D3) at 1  $\mu$ g/mL (100  $\mu$ L/well) on streptavidin (Cat. No. STN-N5116) precoated (0.5  $\mu$ g/well) plate can bind Anti-Claudin-18.2 Antibody with a linear range of 0.1-2  $\mu$ g/mL (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.

## **Clinical and Translational Updates**

