Biotinylated Human Claudin-18.1 Full Length Protein, His,Flag Tag&Avitag™ (Nanodisc)

Catalog # CL1-H85D4

Application

- Cell based assay (FACS or functional assay)
- Affinity testing (SPR / BLI)
- Screening (ELISA)

Synonyms

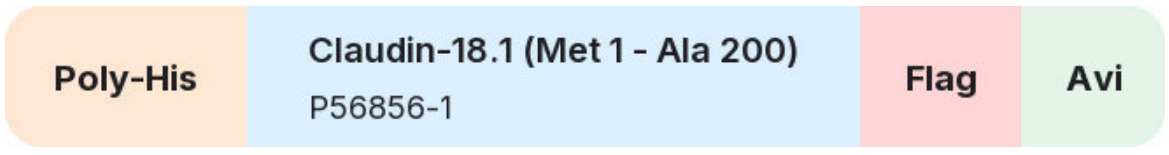
Claudin-18.1, CLDN18, Claudin-18

Source

Nanodisc Biotinylated Human Claudin-18.1 Full Length Protein, His,Flag Tag&Avitag (CL1-H85D4) is expressed from Baculovirus-Insect cells. It contains AA Met 1 - Ala 200 (Accession # P56856-1).

Predicted N-terminus: Met

Molecular Characterization

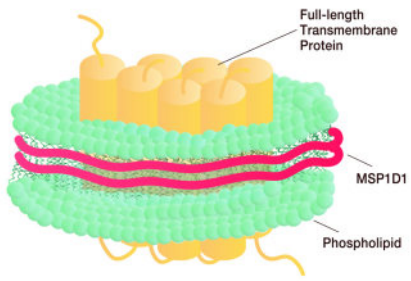


This protein carries a polyhistidine tag at the N-terminus, followed by a flag tag and an Avi tag (Avitag™) at the C-terminus.

The protein has a calculated MW of 26.9 kDa.

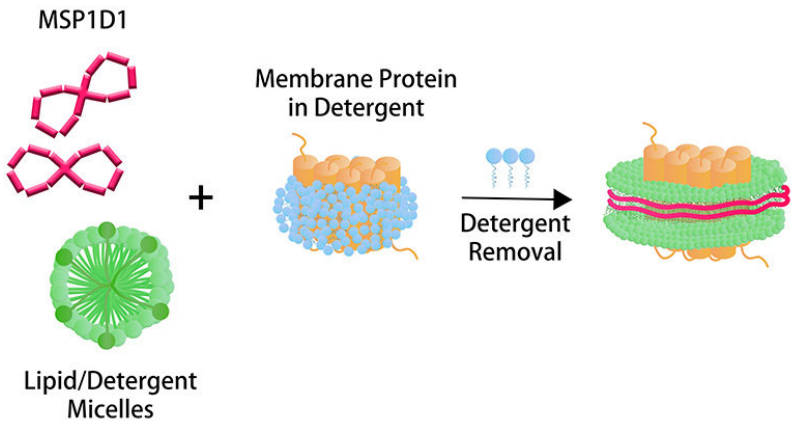
*The isotype control of empty/mock nanodisc (Cat. No. APO-H81Q5) is sold separately and not included in protein, you can follow the link for product information.

- **Structure**



Nanodisc membrane protein is wrapped by a synthetic phospholipid bilayer membrane structure, composed of membrane scaffold proteins (MSPs) and phospholipids.

- **Synthesis Process**



Nanodisc reconstitution is a self-assembly process that **starts from purified, detergent-solubilized membrane proteins** and reconstitutes them into synthetic phospholipid bilayers stabilized by MSP1D1 membrane scaffold protein. This creates a stable, detergent-free environment that preserves native conformation and biological activity, with excellent homogeneity and full compatibility with **cell-based assays such as FACS** and binding assays in antibody discovery and screening (ELISA),etc.

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 SABA assay / HABA assay / binding ELISA.

Formulation

Supplied as 0.2 μm filtered solution in 10 mM HEPES, 150 mM NaCl, pH7.5 with trehalose as protectant.

Contact us for customized product form or formulation.

Shipping and Storage

This product is supplied and shipped on dry ice.

Please avoid repeated freeze-thaw cycles.

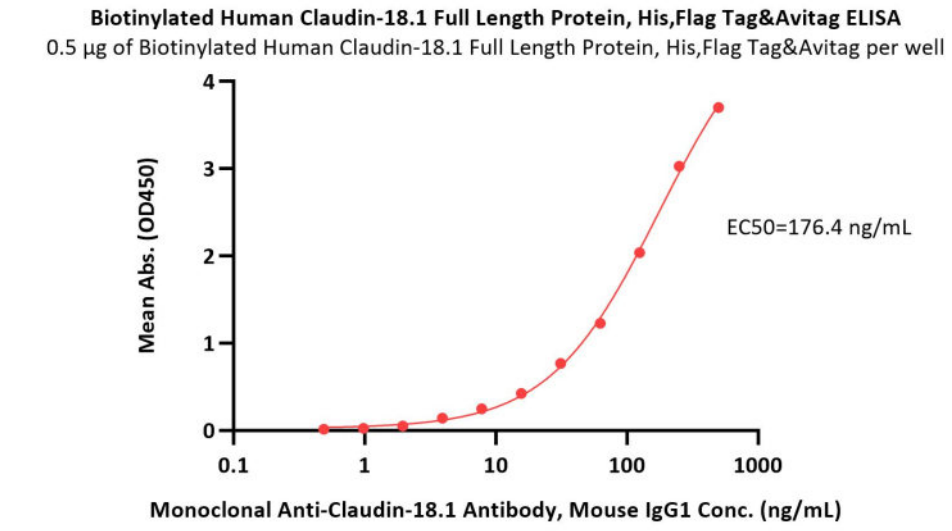
This product is stable after storage at:

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

ACRO Quality Management System

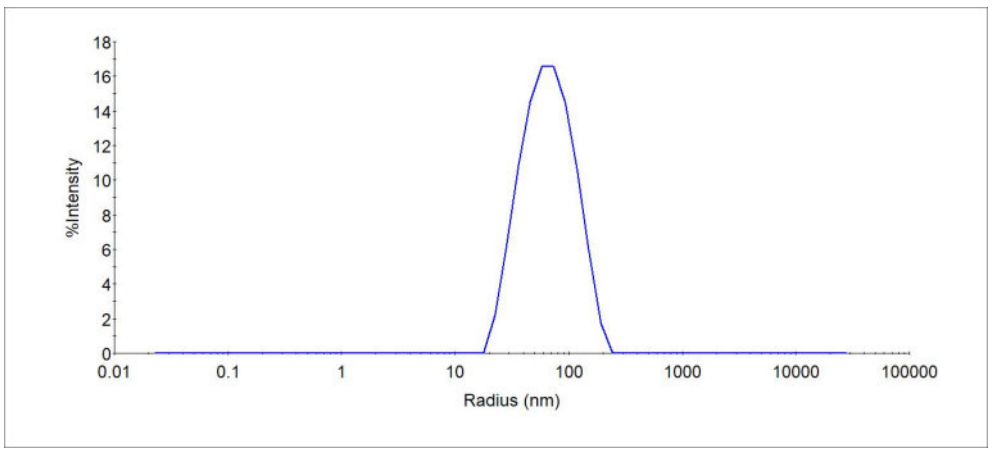
- QMS(ISO, GMP)
- Quality Advantages
- Quality Control Process

Activity-ELISA



Immobilized Biotinylated Human Claudin-18.1 Full Length Protein, His,Flag Tag&Avitag (Cat. No. CL1-H85D4) at 5 μg/mL (100 μL/well) on streptavidin (Cat. No. STN-N5116) precoated (0.5 μg/well) plate can bind Monoclonal Anti-Claudin-18.1 Antibody, Mouse IgG1 with a linear range of 0.5-250 ng/mL (QC tested).

Identity-DLS



The mean peak Radius of VLP is 45-75 nm with more than 95% intensity as determined by dynamic light scattering (DLS).

Background

The lung-specific splice variant of Claudin-18, forming tight junction strands in alveolar epithelium. It is the dominant isoform in normal lung tissue. Therapeutic targeting focuses exclusively on the cancer-associated Claudin-18.2 isoform, requiring high-specificity antibodies to avoid cross-reactivity and pulmonary toxicity.

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