

PRODUCT INFORMATION

Tag	C-Flag&Strep Tag
Expression Host	HEK293
Target	CLDN6
Synonyms	Claudin 6, Claudin-6, Skullin, Claudin6
Description	Human CLDN6-Strep full length protein-PeptiNanodisc
Uniprot ID	P56747
Protein Families	Transmembrane
Protein Pathways	Cell adhesion molecules (CAMs), Leukocyte transendothelial migration, Tight junction
Molecular Weight	The human full length CLDN6-Strep Protein has a MW of 23.3 kDa
Delivery	In Stock
Formulation & Reconstitution	Lyophilized from nanodisc solubilization buffer (20 mM Tris-HCl, 150 mM NaCl, pH 8.0). Normally 5% - 8% trehalose is added as protectants before lyophilization. Please see Certificate of Analysis for specific instructions.
Sterility	Products are supplied non-sterile. For cell culture applications, dilute in appropriate medium and sterile-filter (0.22 µm) prior to use.
Storage&Shipping	Store at -20°C to -80°C for 12 months in lyophilized form. After reconstitution, if not intended for use within a month, aliquot and store at -80°C (Avoid repeated freezing and thawing). Lyophilized proteins are shipped at ambient temperature.
Background	Tight junctions represent one mode of cell-to-cell adhesion in epithelial or endothelial cell sheets, forming continuous seals around cells and serving as a physical barrier to prevent solutes and water from passing freely through the paracellular space. These junctions are comprised of sets of continuous networking strands in the outwardly facing cytoplasmic leaflet, with complementary grooves in the inwardly facing extracytoplasmic leaflet. This gene encodes a component of tight junction strands, which is a member of the claudin family. The protein is an integral membrane protein and is one of the entry cofactors for hepatitis C virus. The gene methylation may be involved in esophageal tumorigenesis. This gene is adjacent to another family member CLDN9 on chromosome 16.
Usage	Research use only
Conjugate	Unconjugated



ELISA assay to evaluate CLDN6-Strep-PeptiNanodisc 0.2 μ g Human CLDN6-Strep-PeptiNanodisc per well

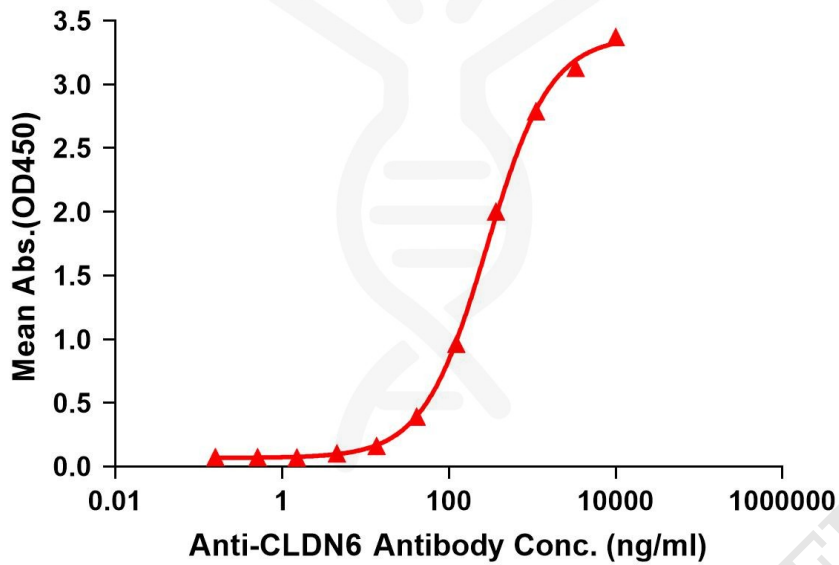


Figure 1. Elisa plates were pre-coated with C-Flag&Strep Tag CLDN6-Strep-PeptiNanodisc (0.2 μ g/per well). Serial diluted anti-CLDN6 monoclonal antibody (DMC101199) solutions were added, washed, and incubated with secondary antibody before Elisa reading. From above data, the EC50 for anti-CLDN6 monoclonal antibody binding with CLDN6-Strep-PeptiNanodisc is 286.0ng/ml.

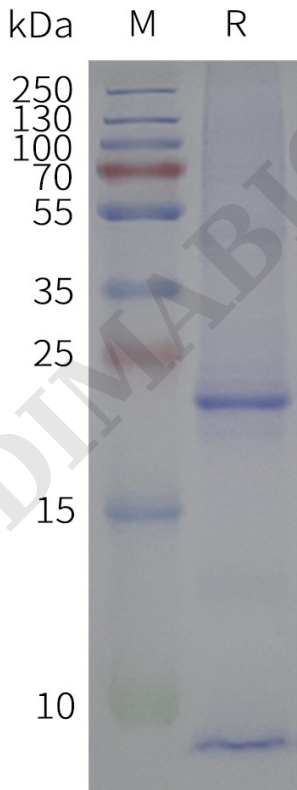
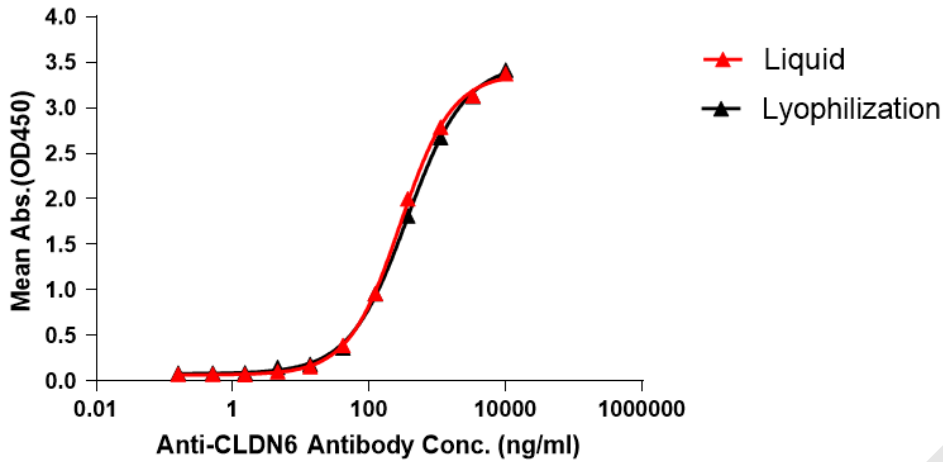


Figure 2. Human CLDN6-Strep-PeptiNanodisc, C-Flag&Strep Tag on SDS-PAGE



ELISA assay to evaluate CLDN6-Strep-PeptiNanodisc
0.2µg Human CLDN6-Strep-PeptiNanodisc per well

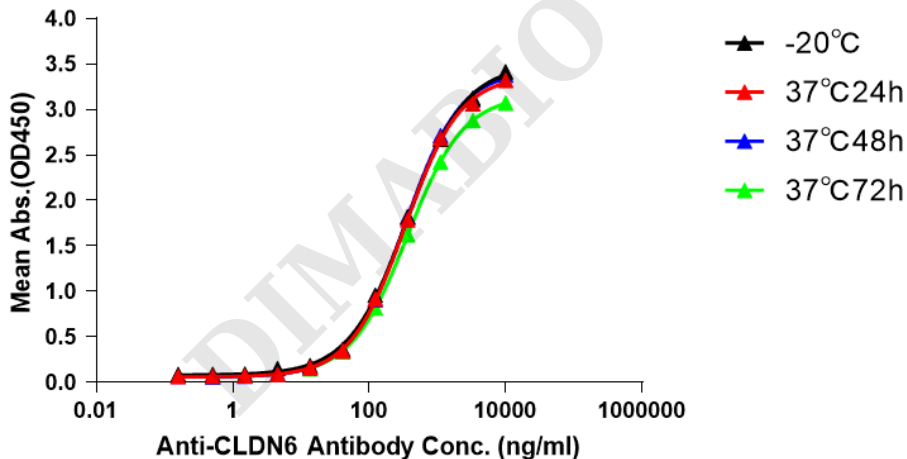


Frozen storage at -80°C EC50=286.0ng/ml

Lyophilized format: EC50=361.3ng/ml

Figure 3. Using functional ELISA, the binding activity of CLDN6-Strep PeptiNanodisc to CLDN6 antibody (DMC101199) was measured in both liquid and lyophilized powder forms. The results showed no significant difference in EC50.

ELISA assay to evaluate CLDN6-Strep-PeptiNanodisc
0.2µg Human CLDN6-Strep-PeptiNanodisc per well



-20°C: EC50=361.3ng/ml 37°C 24h: EC50=337.0ng/ml

37°C 48h: EC50=340.1ng/ml 37°C 72h: EC50=364.6ng/ml

Figure 4. Functional ELISA was used to assess the binding activity of CLDN6-Strep PeptiNanodisc to CLDN6 antibody under different storage conditions: -20°C, 37°C for 24 hours, 37°C for 48 hours, and 37°C for 72 hours. The results showed no significant difference in EC50.



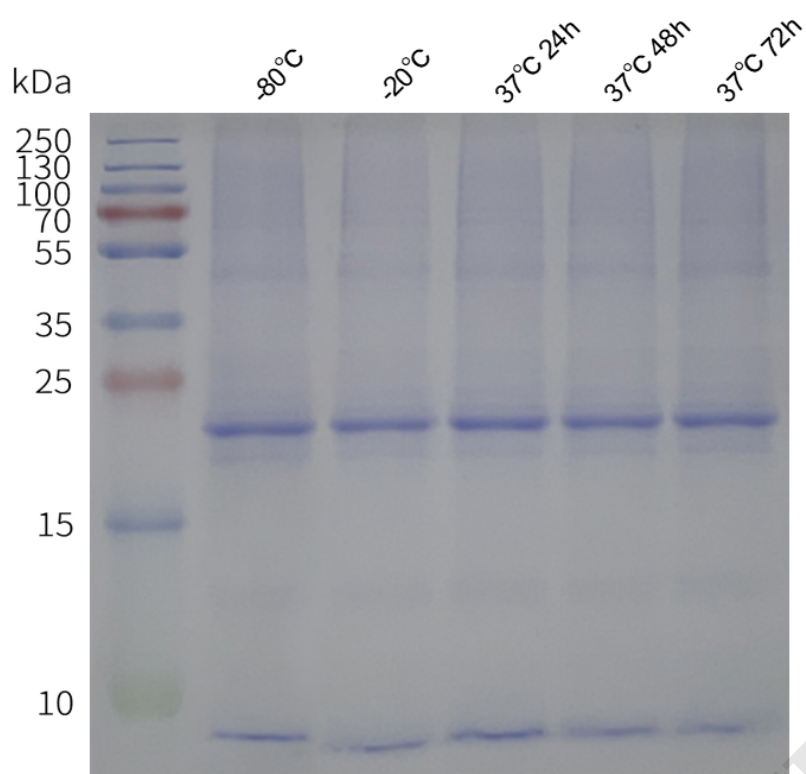


Figure 5. SDS-PAGE analysis showed that under different conditions (liquid state at -80°C, lyophilized powder at -20°C, and lyophilized powder stored at 37°C for 24h, 48h, and 72h), the band position and intensity of CLDN6-Strep PeptiNanodisc exhibited no significant differences.

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