

PRODUCT INFORMATION

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| Target | CLDN18.2 |
| Synonyms | Claudin 18.2 |
| Description | Human CLDN18.2 full length protein-synthetic nanodisc |
| Delivery | In Stock |
| Uniprot ID | P56856 |
| Expression Host | HEK293 |
| Protein Families | Transmembrane |
| Protein Pathways | Cell adhesion molecules (CAMs), Leukocyte transendothelial migration, Tight junction |
| Molecular Weight | The human full length CLDN18.2 Protein has a MW of 27.5 kDa |
| 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. Do not use solvents with pH lower than 6.5 in subsequent experiments. |
| 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 | The protein encodes a member of the claudin family. Claudins are integral membrane proteins and components of tight junction strands. Tight junction strands serve as a physical barrier to prevent solutes and water from passing freely through the paracellular space between epithelial or endothelial cell sheets, and also play critical roles in maintaining cell polarity and signal transductions. This gene is upregulated in patients with ulcerative colitis and highly overexpressed in infiltrating ductal adenocarcinomas. PKC/MAPK/AP-1 (protein kinase C/mitogen-activated protein kinase/activator protein-1) dependent pathway regulates the expression of this gene in gastric cells. Alternatively spliced transcript variants encoding different isoforms have been identified. [provided by RefSeq, Jun 2010] |
| Usage | Research use only |



ELISA assay to evaluate CLDN18.2-Nanodisc 0.2 μ g Human CLDN18.2 Nanodisc per well

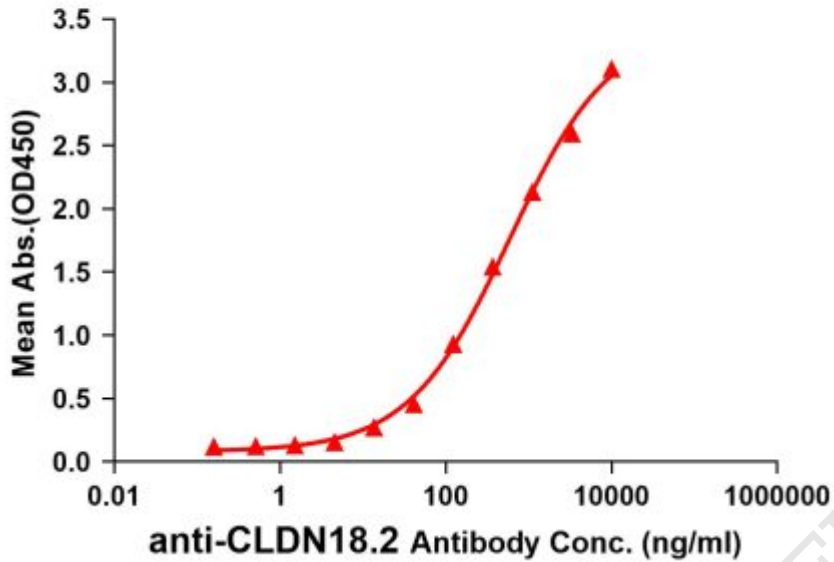


Figure1. Elisa plates were added with Flag Tag CLDN18.2-Nanodisc (0.2 μ g/per well) on an anti-Flag monoclonal antibody pre-coated (0.2 μ g/per well) plate. Serial diluted anti- CLDN18.2 monoclonal antibody (BME100075) solutions were added, washed, and incubated with secondary antibody before Elisa reading. From above data, the EC₅₀ for anti- CLDN18.2 monoclonal antibody binding with CLDN18.2-Nanodisc is 593.6ng/ml.



Figure2. Human CLDN18.2-Nanodisc, Flag Tag on SDS-PAGE



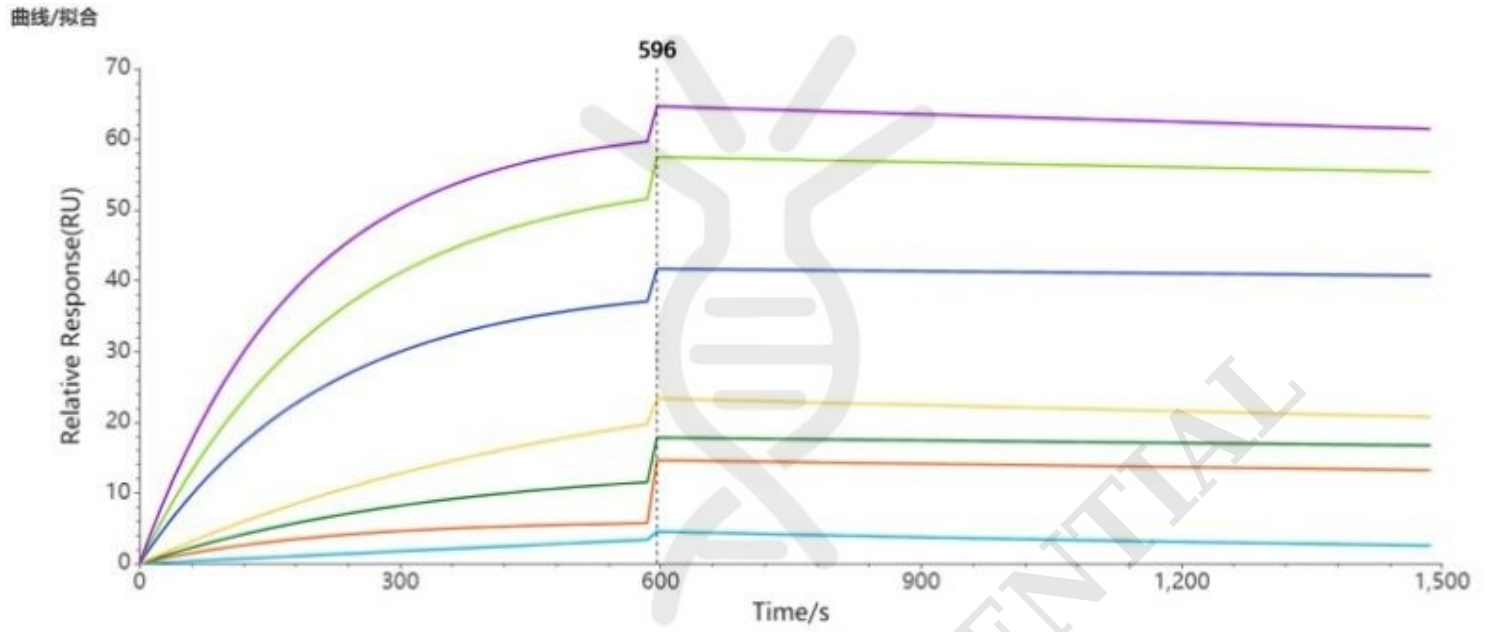


Figure3. Human CLDN18.2-Nanodisc can bind Anti-CLDN18.2 antibody (BME100075) with an affinity constant of 1.619 nM as determined in a SPR assay.

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