## PRODUCT INFORMATION

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|---|---|
| **Tag** | C-Flag&Strep Tag |
| **Target** | CLDN18.2 |
| **Synonyms** | SFTA5; SFTPJ |
| **Description** | Human CLDN18.2-Strep full length protein-synthetic nanodisc |
| **Delivery** | In Stock |
| **Uniprot ID** | P56856-2 |
| **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-Strep 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 a pH below 6.5 or those containing high concentrations of divalent metal ions (greater than 5 mM) 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. |
| **Sterility** | Products are supplied non-sterile. For cell culture applications, dilute in appropriate medium and sterile-filter (0.22 μm) prior to use. |
| **Background** | 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. |
| **Usage** | Research use only |
| **Conjugate** | Unconjugated |

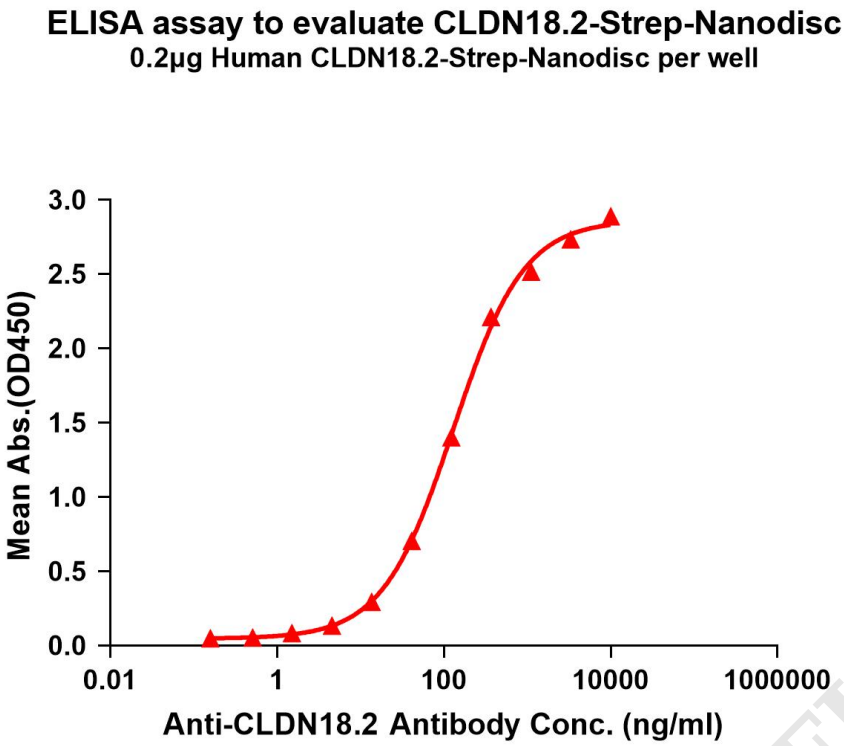


Figure 1. Elisa plates were pre-coated with C-Flag&Strep Tag CLDN18.2-Strep-Nanodisc (0.2μg/per well). Serial diluted anti-CLDN18.2 monoclonal antibody (BME100075) solutions were added, washed, and incubated with secondary antibody before Elisa reading. From above data, the EC50 for anti-CLDN18.2 monoclonal antibody binding with CLDN18.2-Strep-Nanodisc is 129.8ng/ml.


Figure 2. Human CLDN18.2-Strep-Nanodisc, C-Flag&Strep Tag on SDS-PAGE

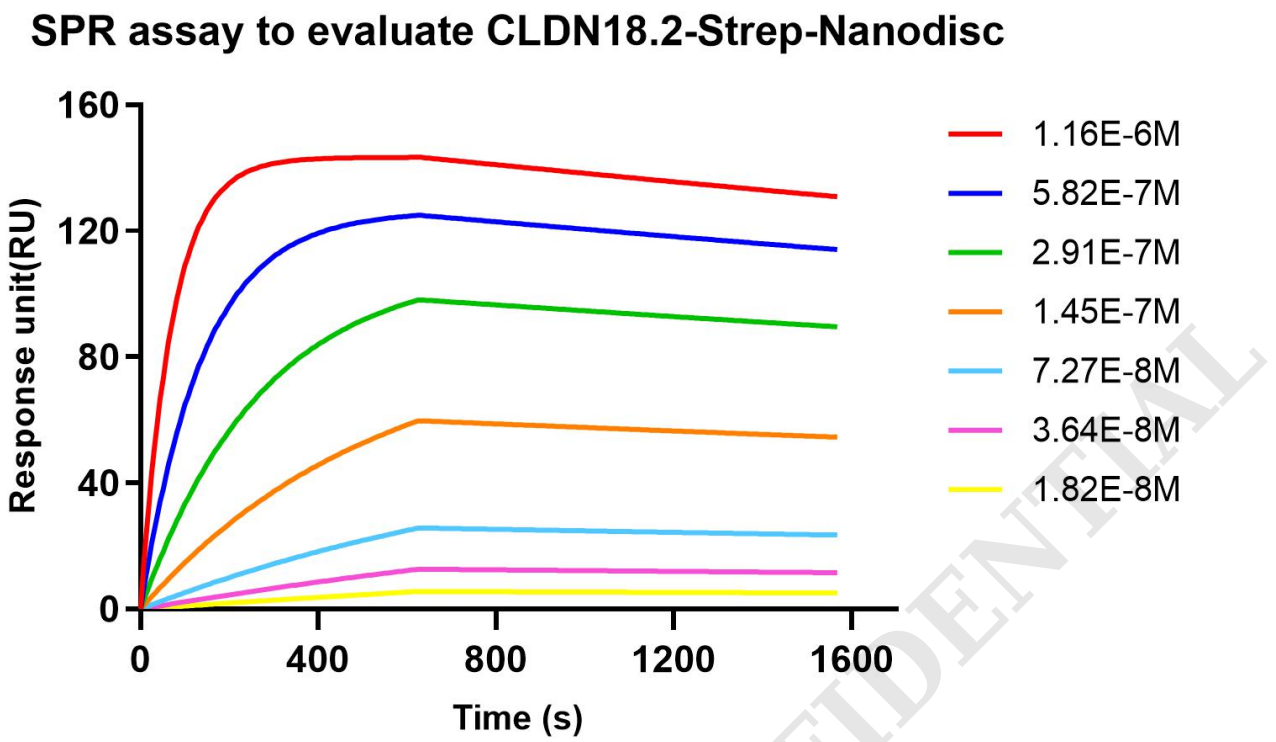


Figure 3. Loaded Human CLDN18.2 monoclonal antibody (BME100075) on Pro-A Biosensor, can bind human CLDN18.2-Strep full length protein-synthetic nanodisc with an affinity constant of 8.09nM as determined in SPR assay.