

PRODUCT INFORMATION

Tag	C-Flag Tag
Expression Host	HEK293
Target	CLDN18.2
Synonyms	Claudin 18.2
Description	Human CLDN18.2 full length protein-synthetic nanodisc
Uniprot ID	P56856-2
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
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. 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.
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	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
Conjugate	Unconjugated



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

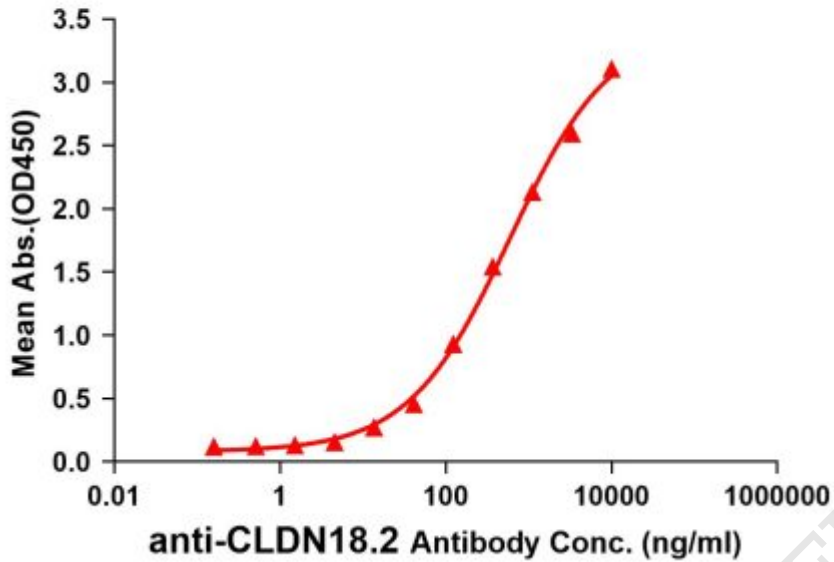


Figure1. Elisa plates were added with Flag Tag CLDN18.2-Nanodisc (0.2 μ g/per well) on an anti-Flag monoclonal antibody pre-coated (0.2 μ g/per well) plate. Serial diluted anti- CLDN18.2 monoclonal antibody (BME100075) solutions were added, washed, and incubated with secondary antibody before Elisa reading. 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



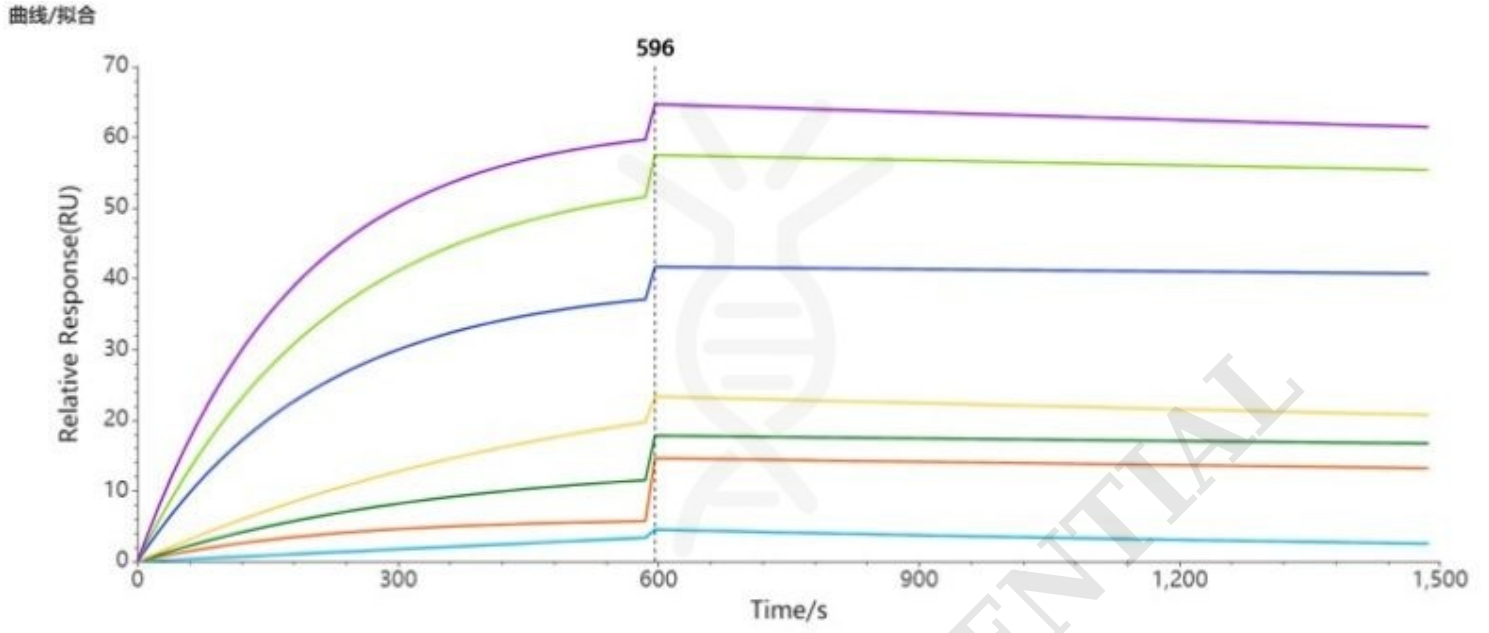


Figure3. Human CLDN18.2-Nanodisc can bind Anti-CLDN18.2 antibody (BME100075) with an affinity constant of 1.619 nM as determined in a SPR assay.

