PRODUCT INFORMATION

Tag	C-Flag Tag
Expression Host	HEK293
Target	CLDN4
Synonyms	CPE-R; CPER; CPETR; CPETR1; hCPE-R; WBSCR8
Description	Human CLDN4 full length protein-synthetic nanodisc
Uniprot ID	O14493
Protein Families	Druggable Genome, Transmembrane
Protein Pathways	Cell adhesion molecules (CAMs), Leukocyte transendothelial migration, Tight junction
Molecular Weight	The human full length CLDN4 protein has a MW of 22.1 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 belongs to the claudin family. Claudins are integral membrane proteins that are components of the epithelial cell tight junctions, which regulate movement of solutes and ions through the paracellular space. This protein is a high-affinity receptor for Clostridium perfringens enterotoxin (CPE) and may play a role in internal organ development and function during pre- and postnatal life. This gene is deleted in Williams-Beuren syndrome, a neurodevelopmental disorder affecting multiple systems.
Usage	Research use only
Conjugate	Unconjugated

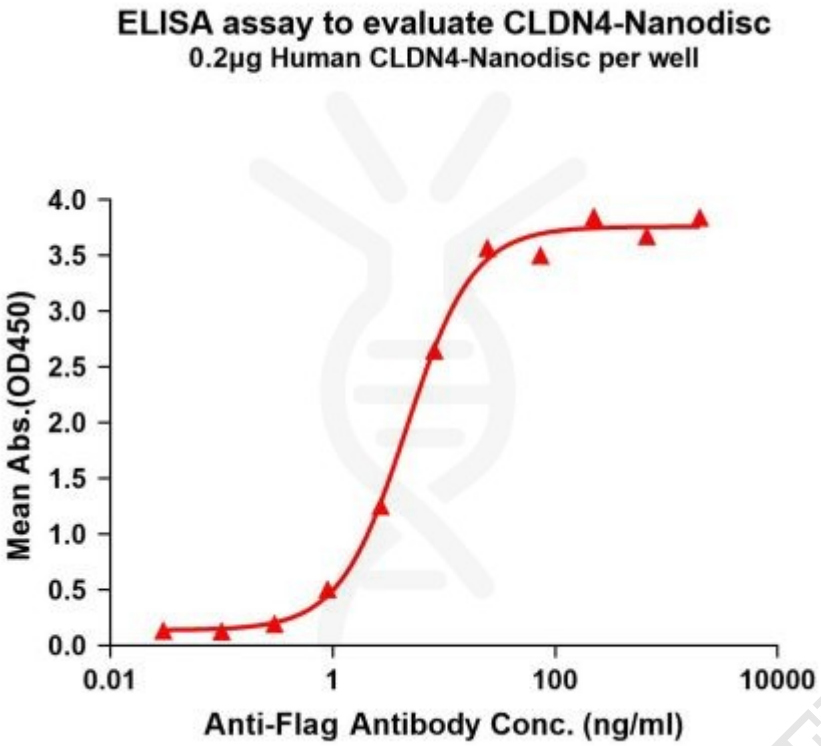

Figure1. Elisa plates were pre-coated with Flag Tag CLDN4-Nanodisc (0.2μg/per well). Serial diluted anti-Flag monoclonal antibody solutions were added, washed, and incubated with secondary antibody before Elisa reading. From above data, the EC50 for anti-Flag monoclonal antibody binding with CLDN4-Nanodisc is 4.607ng/ml.

Figure2. Human CLDN4-Nanodisc, Flag Tag on SDS-PAGE