ARG45179
anti-CLDN16 / Claudin 16 antibody

Package: 50 µg
Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes CLDN16 / Claudin
Tested Reactivity	Hu, Ms, Rat
Tested Application	FACS, ICC/IF, WB
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Target Name	CLDN16 / Claudin
Species	Human
Immunogen	Synthetic peptide corresponding to C-terminal region of human CLDN16 / Claudin.
Conjugation	Un-conjugated
Alternate Names	CLDN16; Claudin 16; PCLN1; Paracellin-1; HOMG3; Hypomagnesemia 3, With Hypercalciuria And Nephrocalcinosis; Claudin-16; PCLN-1

Application Instructions

Application table

Application	Dilution
FACS	1 - 3 µg/10^6 cells
ICC/IF	5 µg/ml
WB	0.25-0.5 µg/ml

Application Note: * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.

Observed Size: 34 kDa

Properties

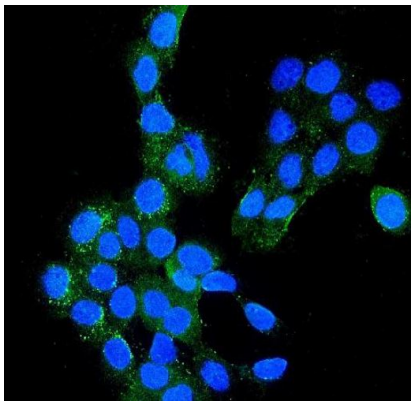
Form	Liquid
Purification	Affinity purification with immunogen.
Buffer	0.9% NaCl, 0.2% Na2HPO4, 0.01% Sodium azide and 4% Trehalose.
Preservative	0.01% Sodium azide
Stabilizer	4% Trehalose
Concentration	0.5 mg/ml
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.

Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

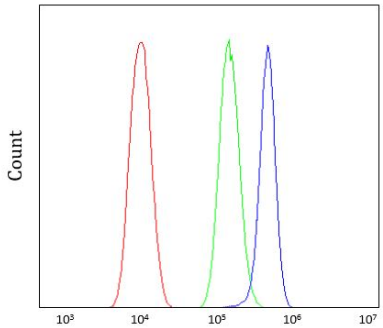
Gene Symbol	CLDN16
Gene Full Name	Claudin 16
Background	Claudin-16 is a protein that in humans is encoded by the CLDN16 gene. Tight junctions represent one mode of cell-to-cell adhesion in epithelial or endothelial cell sheets, forming continuous seals around cells and serving as a physical barrier to 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. The protein encoded by this gene, a member of the claudin family, is an integral membrane protein and a component of tight junction strands. It is found primarily in the kidneys, specifically in the thick ascending limb of Henle, where it acts as either an intercellular pore or ion concentration sensor to regulate the paracellular resorption of magnesium ions. Defects in this gene are a cause of primary hypomagnesemia, which is characterized by massive renal magnesium wasting with hypomagnesemia and hypercalciuria, resulting in nephrocalcinosis and renal failure. This gene and the CLDN1 gene are clustered on chromosome 3q28.
Function	Forms paracellular channels: coassembles with CLDN19 into tight junction strands with cation-selective channels through the strands, conveying epithelial permeability in a process known as paracellular tight junction permeability. [UniProt]
Calculated Mw	26 kDa
Cellular Localization	Cell junction; Cell membrane [UniProt]

Images



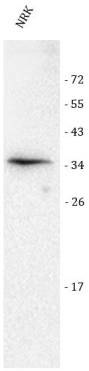
ARG45179 anti-CLDN16 / Claudin 16 antibody ICC/IF image

Immunofluorescence: A431 stained with ARG45179 anti-CLDN16 / Claudin 16 antibody at 5 ug/ml dilution.



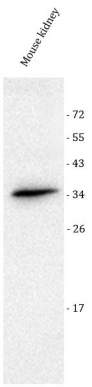
ARG45179 anti-CLDN16 / Claudin 16 antibody FACS image

Flow Cytometry: PC-3 stained with ARG45179 anti-CLDN16 / Claudin 16 antibody at 1 µg/10^6 cells dilution.



ARG45179 anti-CLDN16 / Claudin 16 antibody WB image

Western blot: NRK stained with ARG45179 anti-CLDN16 / Claudin 16 antibody at 0.5 µg/ml dilution.



ARG45179 anti-CLDN16 / Claudin 16 antibody WB image

Western blot: Mouse kidney stained with ARG45179 anti-CLDN16 / Claudin 16 antibody at 0.5 µg/ml dilution.