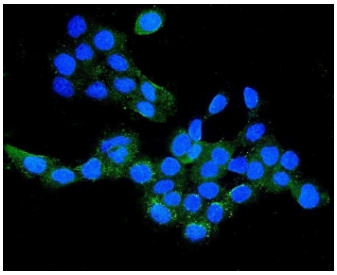
Claudin 16 Antibody / CLDN16 (RQ5716)

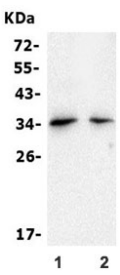
Catalog No.	Formulation	Size
RQ5716	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

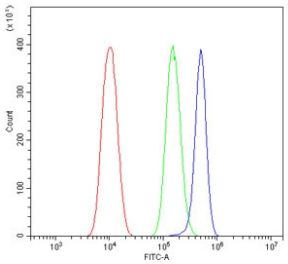
Availability	1-3 business days
Species Reactivity	Human, Mouse, Rat
Format	Antigen affinity purified
Clonality	Polyclonal
Isotype	Rabbit IgG
Purity	Affinity purified
Buffer	Lyophilized from 1X PBS with 2% Trehalose and 0.025% sodium azide
UniProt	Q9Y5I7
Applications	Western Blot : 0.5-1ug/ml Immunofluorescence : 2-4ug/ml Flow Cytometry : 1-3ug/million cells
Limitations	This Claudin 16 antibody is available for research use only.



Immunofluorescent staining of FFPE human A431 cells with Claudin 16 antibody (green) and DAPI nuclear stain (blue). HIER: steam section in pH6 citrate buffer for 20 min.



Western blot testing of 1) mouse kidney and 2) rat NRK cells with Claudin 16 antibody. Predicted molecular weight ~34 kDa.



Flow cytometry testing of human PC-3 cells with Claudin 16 antibody at 1ug/million cells (blocked with goat sera); Red=cells alone, Green=isotype control, Blue= Claudin 16 antibody.

Description

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.

Application Notes

Optimal dilution of the Claudin 16 antibody should be determined by the researcher.

Immunogen

Amino acids KSYSAPRTETAKMYAVDTRV from the human protein were used as the immunogen for the Claudin 16 antibody.

Storage

After reconstitution, the Claudin 16 antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.