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CLDN16 Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP10435A

Specification

CLDN16 Antibody (N-term) - Product Information

Application	**WB, IHC-P, FC,E**
Primary Accession	Q9Y5I7
Other Accession	NP_006571.1
Reactivity	**Human**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Calculated MW	**26078**
Antigen Region	**6-33**

CLDN16 Antibody (N-term) - Additional Information

Gene ID 10686

Other Names
Claudin-16, Paracellin-1, PCLN-1, CLDN16, PCLN1

Target/Specificity
This CLDN16 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 6-33 amino acids from the N-terminal region of human CLDN16.

Dilution
WB~~1:1000
IHC-P~~1:10~50
FC~~1:10~50

Format
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage
Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
CLDN16 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

CLDN16 Antibody (N-term) - Protein Information

Name CLDN16

Synonyms PCLN1

Function Plays a major role in tight junction-specific obliteration of the intercellular space, through calcium-independent cell-adhesion activity. Involved in paracellular magnesium reabsorption. Required for a selective paracellular conductance. May form, alone or in partnership with other constituents, an intercellular pore permitting paracellular passage of magnesium and calcium ions down their electrochemical gradients. Alternatively, it could be a sensor of magnesium concentration that could alter paracellular permeability mediated by other factors.

Cellular Location
Cell junction, tight junction. Cell membrane; Multi-pass membrane protein

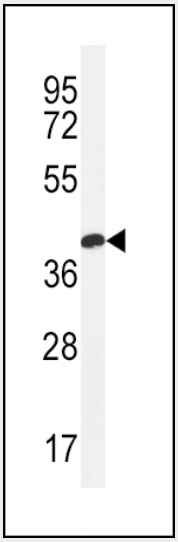
Tissue Location
Kidney-specific, including the thick ascending limb of Henle (TAL)

CLDN16 Antibody (N-term) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

CLDN16 Antibody (N-term) - Images



CLDN16 Antibody (N-term) (Cat. #AP10435a) western blot analysis in MDA-MB435 cell line lysates (35ug/lane).This demonstrates the CLDN16 antibody detected the CLDN16 protein (arrow).

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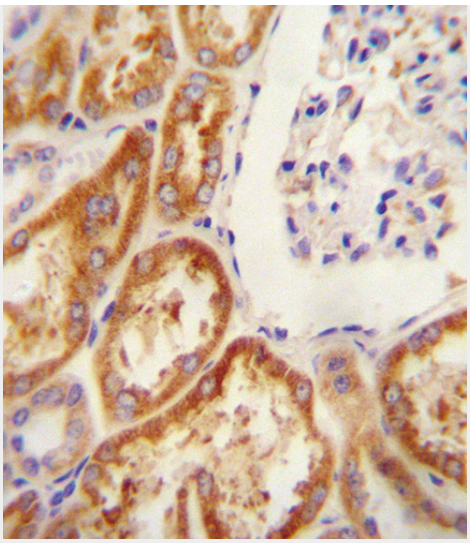
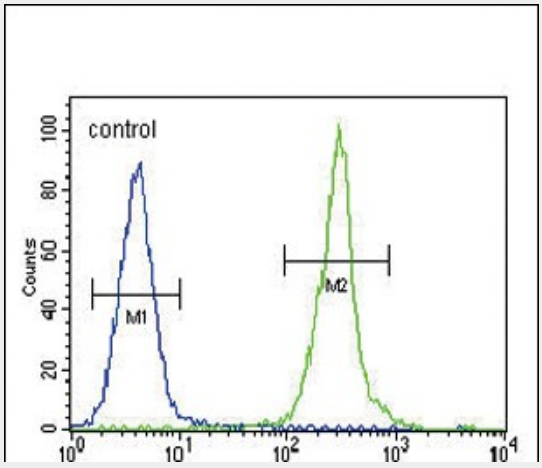


CLDN16 antibody (N-term) (Cat. #AP10435a) immunohistochemistry analysis in formalin fixed and paraffin embedded human Kidney tissue followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of the CLDN16 antibody (N-term) for immunohistochemistry. Clinical relevance has not been evaluated.



CLDN16 Antibody (N-term) (Cat. #AP10435a) flow cytometric analysis of MDA-MB435 cells (right histogram) compared to a negative control cell (left histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

CLDN16 Antibody (N-term) - Background

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.

CLDN16 Antibody (N-term) - References

Kuo, S.J., et al. Oncol. Rep. 24(3):759-766(2010)
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Lal-Nag, M., et al. Genome Biol. 10 (8), 235 (2009) :