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CLDN16 Antibody (N-term) Blocking peptide

Synthetic peptide
Catalog # BP10435a

Specification

CLDN16 Antibody (N-term) Blocking peptide - Product Information

Primary Accession	Q9Y5I7
Other Accession	NP_006571.1

CLDN16 Antibody (N-term) Blocking peptide - Additional Information

Gene ID 10686

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

Format
Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions
This product is for research use only. Not for use in diagnostic or therapeutic procedures.

CLDN16 Antibody (N-term) Blocking peptide - 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)

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CLDN16 Antibody (N-term) Blocking peptide - Protocols

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

- Blocking Peptides

CLDN16 Antibody (N-term) Blocking peptide - Images

CLDN16 Antibody (N-term) Blocking peptide - Background

Tight junctions represent one mode of cell-to-celladhesion in epithelial or endothelial cell sheets, formingcontinuous seals around cells and serving as a physical barrier toprevent solutes and water from passing freely through theparacellular space. These junctions are comprised of sets ofcontinuous networking strands in the outwardly facing cytoplasmicleaflet, with complementary grooves in the inwardly facingextracytoplasmic leaflet. The protein encoded by this gene, amember of the claudin family, is an integral membrane protein and acomponent of tight junction strands. It is found primarily in thekidneys, specifically in the thick ascending limb of Henle, whereit acts as either an intercellular pore or ion concentration sensorto regulate the paracellular resorption of magnesium ions. Defectsin this gene are a cause of primary hypomagnesemia, which ischaracterized by massive renal magnesium wasting withhypomagnesemia and hypercalciuria, resulting in nephrocalcinosisand renal failure. This gene and the CLDN1 gene are clustered onchromosome 3q28.

CLDN16 Antibody (N-term) Blocking peptide - References

Kuo, S.J., et al. Oncol. Rep. 24(3):759-766(2010)Efrati, E., et al. Cell. Physiol. Biochem. 25(6):705-714(2010)Shuen, A.Y., et al. Clin. Chim. Acta 409 (1-2), 28-32 (2009) :Al-Haggar, M., et al. Clin. Exp. Nephrol. 13(4):288-294(2009)Lal-Nag, M., et al. Genome Biol. 10 (8), 235 (2009) :