

## Recombinant Human CLDN16 Protein, GST-tagged

Cat. No. CLDN16-1433H Lot. No. (See product label)

### SPECIFICATION

**Product Overview** Human CLDN16 full-length ORF ( NP\_006571.1, 1 a.a. - 305 a.a.) recombinant protein with GST-tag at N-terminal.

**Species** Human

**Source** Wheat Germ

**Description**

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. [provided by RefSeq, Jun 2010]

**Molecular Mass** 60.2 kDa

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**AA Sequence**

MTSRTPLLVTACLYYSYCNSRHLQQGVRKSKRPVFSHCQVPETQKTDTRHLSGARA  
 GVCPCCHPDGLLATMRDLLQYIACFFAFFSAGFLIVATWDCWMVNADDSLEVSTK  
 CRGLWWEVCVTNAFDGIRTCDEYDSILAEHPLKLVVTRALMITADILAGFGFLTLLGL  
 DCVKFLPDEPYIKVRFVAGATLLIAGTPGIIGSVWYAVDVYVERSTLVLHNIFLGIQY  
 KFGWSCWLG MAGSLGCFLAGAVLTCCLYLFKDVGPERNYPYSLRKAYS AAGVSMA  
 KSYSAPRTETAKMYAVDTRV

**Applications**

Enzyme-linked Immunoabsorbent Assay  
 Western Blot (Recombinant protein)  
 Antibody Production  
 Protein Array

**Notes**

Best use within three months from the date of receipt of this protein.

**Storage**

Store at -80 centigrade. Aliquot to avoid repeated freezing and thawing.

**Storage Buffer**

50 mM Tris-HCl, 10 mM reduced Glutathione, pH=8.0 in the elution buffer.

## GENE INFORMATION

**Gene Name** [CLDN16 claudin 16 \[ Homo sapiens \]](#)

**Official Symbol** [CLDN16](#)

**Synonyms**

CLDN16; claudin 16; claudin-16; HOMG3; hypomagnesemia 3; with hypercalciuria and nephrocalcinosis; paracellin 1; PCLN1; PCLN-1; paracellin-1; hypomagnesemia 3, with hypercalciuria and nephrocalcinosis;

**Gene ID** [10686](#)

**mRNA Refseq** [NM\\_006580](#)

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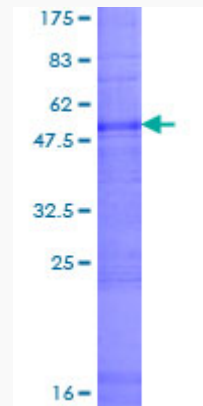
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**Protein Refseq** NP\_006571

**MIM** 603959

**UniProt ID** Q9Y5I7

**Quality Control  
Testing:**



12.5% SDS-PAGE Stained with Coomassie Blue.

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