

Product datasheet for RC210216L2

CLDN16 (NM_006580) Human Tagged Lenti ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	CLDN16 (NM_006580) Human Tagged Lenti ORF Clone
Tag:	mGFP
Symbol:	CLDN16
Synonyms:	HOMG3; PCLN1
Mammalian Cell Selection:	None
Vector:	pLenti-C-mGFP (PS100071)
E. coli Selection:	Chloramphenicol (34 ug/mL)
ORF Nucleotide Sequence:	The ORF insert of this clone is exactly the same as(RC210216).
Restriction Sites:	SgfI-MluI
Cloning Scheme:	

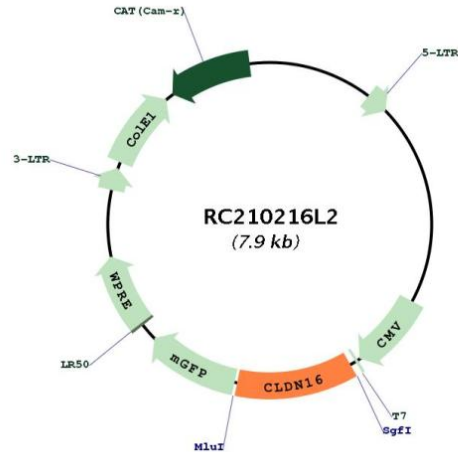
Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF.



[View online >](#)

Plasmid Map:


ACCN: NM_006580

ORF Size: 915 bp

OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. [More info](#)

OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

Reconstitution Method:

1. Centrifuge at 5,000xg for 5min.
2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
3. Close the tube and incubate for 10 minutes at room temperature.
4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.
5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.

RefSeq: [NM_006580.2](#)

RefSeq Size: 3290 bp

RefSeq ORF: 708 bp

Locus ID:	10686
UniProt ID:	Q9Y5I7
Cytogenetics:	3q28
Protein Families:	Druggable Genome, Transmembrane
Protein Pathways:	Cell adhesion molecules (CAMs), Leukocyte transendothelial migration, Tight junction
MW:	33.8 kDa
Gene Summary:	<p>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]</p>