

## Product datasheet for **RC200744**

### Claudin 6 (CLDN6) (NM\_021195) Human Tagged ORF Clone

#### Product data:

Product Type: Expression Plasmids  
 Product Name: Claudin 6 (CLDN6) (NM\_021195) Human Tagged ORF Clone  
 Tag: Myc-DDK  
 Symbol: Claudin 6  
 Mammalian Cell Selection: Neomycin  
 Vector: pCMV6-Entry (PS100001)  
 E. coli Selection: Kanamycin (25 ug/mL)  
 ORF Nucleotide Sequence: >RC200744 ORF sequence  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGATCGCC**

ATGGCCTCTGCCGAATGCAGATCCTGGGAGTCGTCTGACACTGCTGGGCTGGGTGAATGGCCTGGTCT  
 CCTGTGCCCTGCCATGTGGAAGGTGACCGCTTTCATCGGCAACAGCATCGTGGTGGCCAGGTGGTGTG  
 GGAGGGCTGTGGATGTCTGCGTGGTGCAGAGCACCGGCCAGATGCAGTGAAGGTGTACGACTCACTG  
 CTGGCGCTGCCACAGGACCTGCAGGCTGCACGTGCCCTCTGTGTATCGCCCTCCTGTGGCCCTGTTTCG  
 GCTTGTGGTCTACCTTGTGGGCAAGTGTACCACCTGTGGAGGAGAAGGATCCAAGGCCCGCT  
 GGTGCTCACCTCTGGGATTGTCTTTGTATCTCAGGGGTCTGACGCTAATCCCGTGTGCTGGACGGCG  
 CATGCCGTATCCGGACTTCTATAACCCCTGGTGGCTGAGGCCAAAAGCGGGAGCTGGGGCCCTCCC  
 TCTACTTGGGCTGGGCGCCTCAGGCCTTTTGTGCTGGGTGGGGGTTGCTGTGCTGCACTTGCCCTC  
 GGGGGGTCCCAGGGCCCAGCCATTACATGGCCCGCTACTCAACATCTGCCCTGCCATCTCTCGGGG  
 CCCTCTGAGTACCCTACCAAGAATTACGTC

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC200744 protein sequence  
 Red=Cloning site Green=Tags(s)

MASAGMQILGVVLTLLGWVNLVSCALPMWKVTAFIGNSIVVAQVVWEGLWMSCVVQSTGQMCKVYDSL  
 LALPQDLQAARALCVIALLVALLVFLVLAGAKCTTCVEEKDSKARLVLTSGIVFVISGVLTLIPVCWTA  
 HAVIRDFYNPLVAEAQKREL GASLYLGWAASGLLLLGGLLCCTCPSGGSQGPSHYMARYSTSAPAI SRG  
 PSEYPTKNYV

**TR**TRPLEQKLISEEDLAANDILDYKDDDDKV



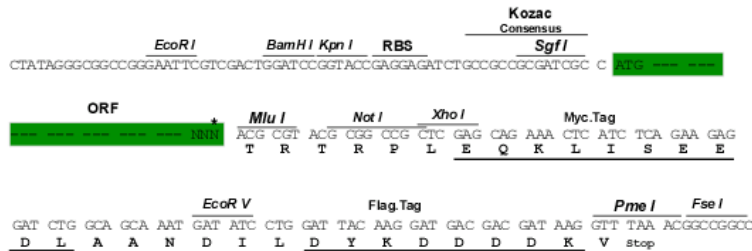
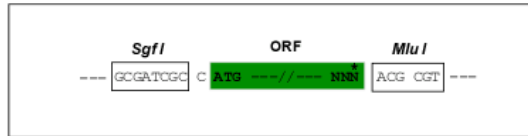
[View online »](#)

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk6085\\_d08.zip](https://cdn.origene.com/chromatograms/mk6085_d08.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**

Cloning sites used for ORF Shuttling:



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

**ACCN:** NM\_021195

**ORF Size:** 660 bp

**OTI Disclaimer:** Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at [custsupport@origene.com](mailto:custsupport@origene.com) or by calling 301.340.3188 option 3 for pricing and delivery.

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.

**Note:** Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

**RefSeq:** [NM\\_021195.3](#), [NP\\_067018.1](#)

**RefSeq Size:** 1389 bp

**RefSeq ORF:** 663 bp

**Locus ID:** 9074

**UniProt ID:** [P56747](#)

**Cytogenetics:** 16p13.3

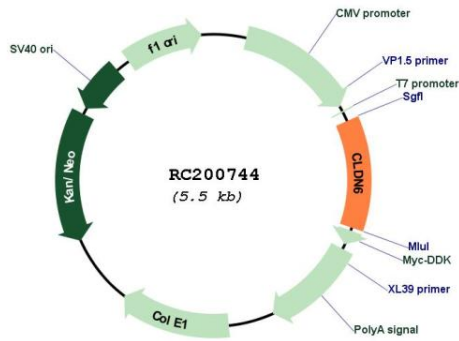
**Protein Families:** Transmembrane

**Protein Pathways:** Cell adhesion molecules (CAMs), Leukocyte transendothelial migration, Tight junction

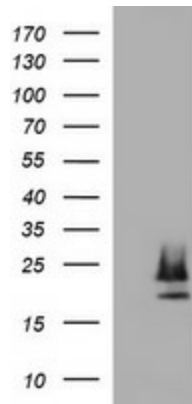
**MW:** 23.3 kDa

**Gene Summary:** 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. This gene encodes a component of tight junction strands, which is a member of the claudin family. The protein is an integral membrane protein and is one of the entry cofactors for hepatitis C virus. The gene methylation may be involved in esophageal tumorigenesis. This gene is adjacent to another family member CLDN9 on chromosome 16.[provided by RefSeq, Aug 2010]

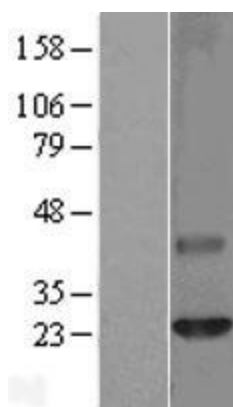
Product images:



Circular map for RC200744



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY CLDN6 (Cat# RC200744, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-CLDN6 (Cat# [TA506891]). Positive lysates [LY412034] (100ug) and [LC412034] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY412034]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC200744 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).