

Product datasheet for **RC210920**

Claudin 17 (CLDN17) (NM_012131) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Claudin 17 (CLDN17) (NM_012131) Human Tagged ORF Clone
Tag: Myc-DDK
Symbol: Claudin 17
Mammalian Cell Selection: Neomycin
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
ORF Nucleotide Sequence: >RC210920 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCATTATCCCTTGCAAATTGCTGGGCTGGTTCTTGGGTTCCCTGGCATGGTGGGGACTCTTGCCA
CAACCTTCTGCCTCAGTGGAGAGTATCAGCTTTTGTGGCAGCAACATTATTGTCTTTGAGAGGCTCTG
GGAAGGGCTCTGGATGAATTGCATCCGACAAGCCAGGGTCCGGTTGCAATGCAAGTTCTATAGCTCCTTG
TTGGCTCTCCCGCTGCCCTGGAACAGCCCGGCCCTCATGTGTGGCTGTTGCTCTCTCCTTGATCG
CCCTGCTTATTGGCATCTGTGGCATGAAGCAGGTCCAGTGCACAGGCTTAACGAGAGGGCCAAAGCATA
CCTTCTGGAACTTCAGGAGTCTCTTTCATCCTGACGGGATCTTCGTTCTGATTCCGGTGAGCTGGACA
GCCAATAAATCATCAGAGATTTCTACAACCCAGCCATCCACATAGGTGACAAACGAGAGCTGGGAGCAG
CACTTTTCTTGGCTGGCAAGGCTGTCTCTTTCATTGGAGGGGTCTGCTTTGTGGATTTTGTGCTG
CTGCAACAGAAAGAAGCAAGGGTACAGATATCCAGTGCCTGGCTACCGTGTGCCACACAGATAAGCGA
AGAAATACGACAATGCTTAGTAAGACCTCCACCAGTTATGTC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC210920 protein sequence
Red=Cloning site Green=Tags(s)

MAFYPLQIAGLVLGFGLMGVTLATLLPQWRVSAFVGSNIIVFERLWEGLWMNCIRQARVRLQCKFYSSL
LALPPALETARALMCVAVALSLIALLIGICGMKQVQCTGSNERAKAYLLGTSGVLFILTGIFVLIIPVSWT
ANIIRDFYNPAIHIGQKRELGAALFLGWASAAVLFIGGGLLCGFCNRRKKQGYRYPVPGYRVPHTDKR
RNTTMLSSTSYV

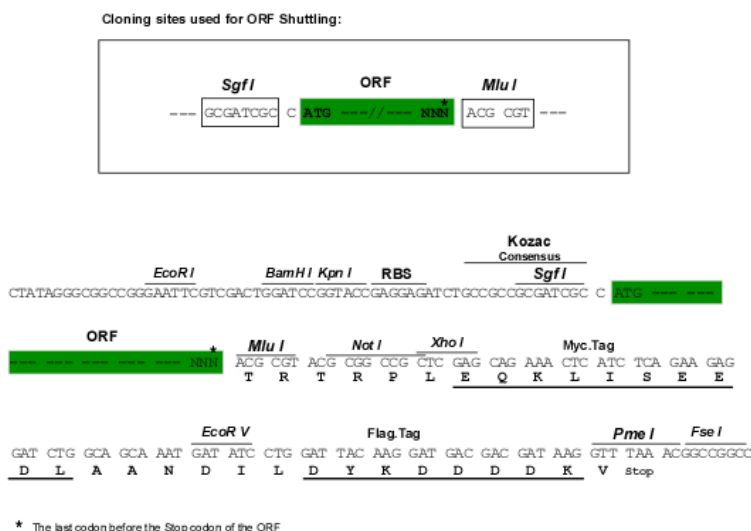
TRTRPLEQKLISEEDLAANDILDYKDDDDKV



Chromatograms: https://cdn.origene.com/chromatograms/mk6383_c12.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_012131

ORF Size: 672 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_012131.3](#)

RefSeq Size: 731 bp

RefSeq ORF: 675 bp

Locus ID: 26285

UniProt ID: [P56750](#)

Cytogenetics: 21q21.3

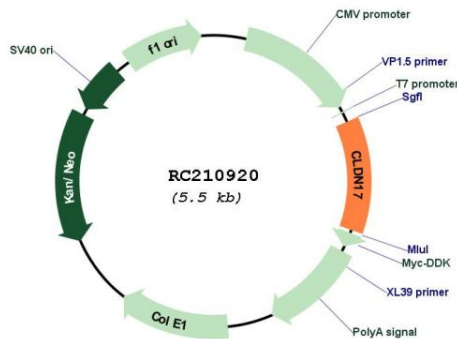
Protein Families: Transmembrane

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

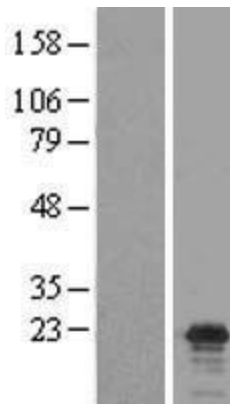
MW: 24.6 kDa

Gene Summary: This gene encodes a member of the claudin family. Claudins are integral membrane proteins and components of tight junction strands. Tight junction strands serve as a physical barrier to prevent solutes and water from passing freely through the paracellular space between epithelial or endothelial cell sheets, and also play critical roles in maintaining cell polarity and signal transductions. This gene is intronless and is clustered with CLDN8 on chromosome 21q22.11. [provided by RefSeq, Jun 2010]

Product images:



Circular map for RC210920



Western blot validation of overexpression lysate (Cat# [LY415958]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC210920 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).