

Product datasheet for **RC225251**

CLDN19 (NM_001123395) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: CLDN19 (NM_001123395) Human Tagged ORF Clone
Tag: Myc-DDK
Symbol: CLDN19
Synonyms: HOMG5
Mammalian Cell Selection: Neomycin
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
ORF Nucleotide Sequence: >RC225251 representing NM_001123395
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCCAACCTCAGGCCTCCAGCTCCTGGGCTACTTCTTGGCCCTGGGTGGCTGGGTGGGCATCATTGCTA
GCACAGCCCTGCCACAGTGAAGCAGTCTTCTACGCAGGCGACGCCATCATCACTGCCGTGGCCCTCTA
TGAAGGGCTCTGGATGTCCTGCGCCTCCAGAGCACTGGGCAAGTGCAGTGAAGCTCTACGACTCGCTG
CTCGCCCTGGACGGTCACATCCAATCAGCGCGGGCCCTGATGGTGGTGGCCGTGCTCTGGGCTTCGTGG
CCATGGTCTCAGCGTAGTTGGCATGAAGTGTACGCGGGTGGGAGACAGCAACCCATTGCCAAGGGCCG
TGTGGCATCGCCGGGGAGCCCTTTCATCCTGGCAGGCTCTGCACTTGGACTGCTGTCTCGTGGTAT
GCCACCCTGGTGACCCAGGAGTTCTTCAACCAAGCACACCTGTCAATGCCAGGTATGAATTTGGCCAG
CCCTGTTCTGGTGGGCTGGGCTCAGCTGGCCTGGCCGTGCTGGGCGGCTCCTTCTCTGCTGCACATGCC
GGAGCCAGAGAGACCCAACAGCAGCCCACAGCCCTATCGGCTGGACCCTCTGCTGCTGCCCGAGAGTAC
GTC

ACGCGTACGCGGGCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



[View online »](#)

Protein Sequence: >RC225251 representing NM_001123395

Red=Cloning site Green=Tags(s)

MANSGLQLLGYFLALGGWVGIIASTALPQWKQSSYAGDAIITAVGLYEGLWMSCASQSTGQVQCKLYDSL
LALDGHIQSARALMVVAVLLGFVAMVLSVYGMKCTRVGDSNPIAKGRVAIAGGALFILAGLCTLTAVSWY
ATLVTQEFFNPSTPVNARYEFGPALFVGWASAGLAVLGGSFLLCCTCPEPERPNSSQPYPYRGPSSAAAREY
V

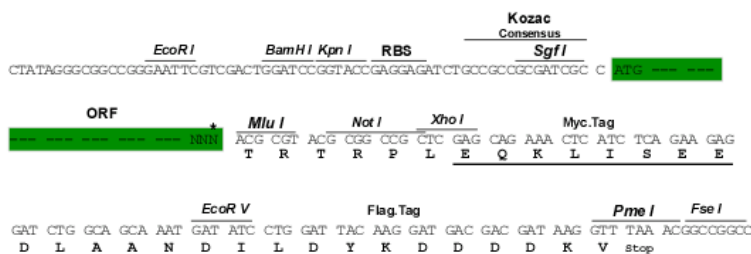
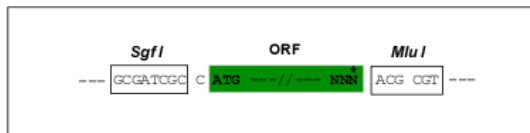
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/ja1428_d07.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_001123395

ORF Size: 633 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_001123395.2](#)

RefSeq ORF: 636 bp

Locus ID: 149461

UniProt ID: [Q8N6F1](#)

Cytogenetics: 1p34.2

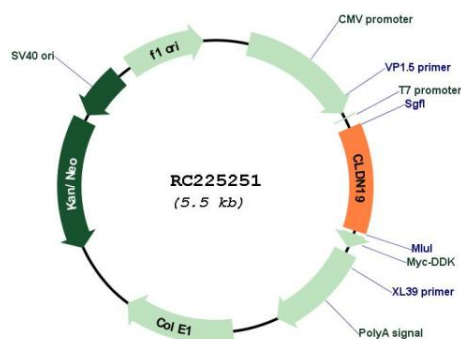
Protein Families: Transmembrane

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

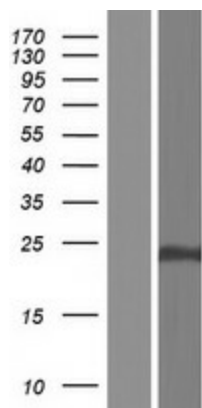
MW: 21.9 kDa

Gene Summary: The product of this gene belongs to the claudin family. It plays a major role in tight junction-specific obliteration of the intercellular space, through calcium-independent cell-adhesion activity. Defects in this gene are the cause of hypomagnesemia renal with ocular involvement (HOMGO). HOMGO is a progressive renal disease characterized by primary renal magnesium wasting with hypomagnesemia, hypercalciuria and nephrocalcinosis associated with severe ocular abnormalities such as bilateral chorioretinal scars, macular colobomata, significant myopia and nystagmus. Alternatively spliced transcript variants encoding distinct isoforms have been identified for this gene. [provided by RefSeq, Jun 2010]

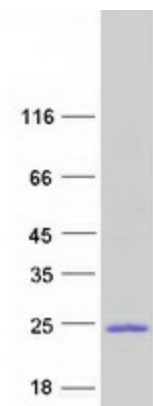
Product images:



Circular map for RC225251



Western blot validation of overexpression lysate (Cat# [LY426624]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC225251 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified CLDN19 protein (Cat# [TP325251]). The protein was produced from HEK293T cells transfected with CLDN19 cDNA clone (Cat# RC225251) using MegaTran 2.0 (Cat# [TT210002]).