

Product datasheet for RC216887

CLDN19 (NM_148960) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	CLDN19 (NM_148960) 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:	>RC216887 representing NM_148960. Blue=ORF Red=Cloning site Green=Tag(s)

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GCTCGTTTAGTGAACCGTCAGAATTTGTAAACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTG
GATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC
ATGGCCAACCTCAGGCCTCCAGCTCCTGGGCTACTTCTTGGCCCTGGGTGGCTGGGTGGGCATCATTGCT
AGCACAGCCCTGCCACAGTGGAAGCAGTCTTCTACGCAGGCACGCCATCATCACTGCCGTGGGCCTC
TATGAAGGGCTCTGGATGTCTGCGCCTCCAGAGCACTGGGCAAGTGCAGTGAAGCTCTACGACTCG
CTGCTCGCCCTGGACGGTCACATCCAATCAGCGCGGGCCCTGATGGTGGTGGCCGTGCTCCTGGGCTTC
GTGGCCATGGTCTCAGCGTAGTTGGCATGAAGTGTACGCGGGTGGGAGACAGCAACCCATTGCCAAG
GGCCGTGTGCCATCGCCGGGGAGCCCTTTCATCCTGGCAGGCCTCTGCACTTTGACTGCTGTCTCG
TGGTATGCCACCCCTGGTACCCAGGAGTTCTTCAACCAAGCACACCTGTCAATGCCAGGTATGAATTT
GGCCAGCCCTGTTCGTGGGCTGGGCTCAGCTGGCCTGGCCGTGCTGGGCGGCTCCTTCTCTGCTGC
ACATGCCCGGAGCCAGAGAGACCAACAGCAGCCACAGCCCTATCGGCCTGGACCTCTGCTGCTGCC
CGAGAACCAGTTGTTAAATTGCCCGCCTCCGCCAAGGGCCCCCTGGGTGTG
ACGCGTACGCGGCCGCTCGAGCAGAAATCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGAT
TACAAGGATGACGACGATAAGGTTTAAACGGCCGGC
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Protein Sequence: >Peptide sequence encoded by RC216887
 Blue=ORF Red=Cloning site Green=Tag(s)

MANSGLQLLGYFLALGGWVGIIASTALPQWKQSSYAGDAIITAVGLYEGLWMSCASQSTGQVQCKLYDS
 LLALDGHIQSARALMVAVLLGFVAMVLSVVGKCTRVGDSNPIAKGRVAIAGGALFILAGLCTLTAVS
 WYATLVTQEFFNPSTPVNARYEFGPALFVGWASAGLAVLGGSFLLCCTCPEPERPNSSPQPYRPGSAAA
 REPVVKLPASAKGPLGV
 TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Recombinant protein using RC216887 also available, [TP316887](#)

Chromatograms: https://cdn.origene.com/chromatograms/mk8012_d09.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_148960

ORF Size: 672 bp

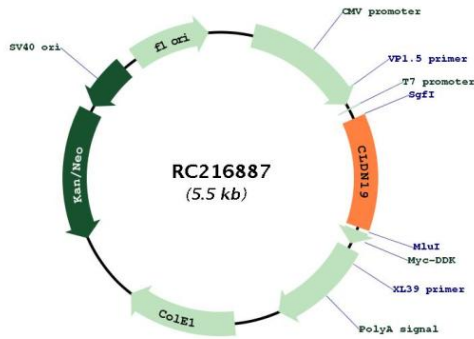
OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially 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.

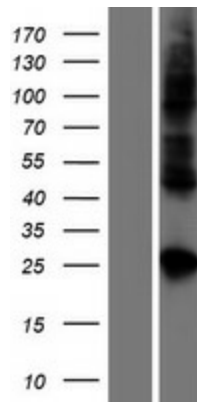
Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

Reconstitution Method:	<ol style="list-style-type: none">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_148960.3
RefSeq Size:	2859 bp
RefSeq ORF:	675 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:	23.2 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]

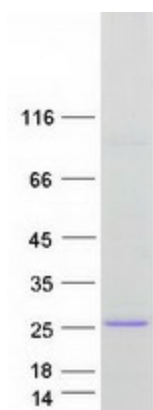
Product images:



Circular map for RC216887



Western blot validation of overexpression lysate (Cat# [LY407723]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC216887 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified CLDN19 protein (Cat# [TP316887]). The protein was produced from HEK293T cells transfected with CLDN19 cDNA clone (Cat# RC216887) using MegaTran 2.0 (Cat# [TT210002]).