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Product datasheet for RC219687

Claudin 14 (CLDN14) (NM_144492) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Claudin 14 (CLDN14) (NM_144492) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Claudin 14
Synonyms:	DFNB29
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC219687 representing NM_144492 Red=Cloning site Blue=ORF Green=Tags(s) TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC GCCGCGATCGCC ATGGCCAGCACGGCCGTGCAGCTTCTGGGCTTCCTGCTCAGCTTCCTGGGCATGGTGGGCACGTTGATCA CCACCATCCTGCCGCACTGGCGGAGGACAGCGCACGTGGGCACCAACATCCTCACGGCCGTGTCCTACCT GAAAGGGCTCTGGATGGAGTGTGTGTGGCACAGCACAGGCATCTACCAGTGCCAGATCTACCGATCCCTG CTGGCGCTGCCCCAAGACCTCCAGGCTGCCCGCGCCCTCATGGTCATCTCCTGCCTGCTCTCGGGCATAG CCTGCGCCTGCGCCGTCATCGGGATGAAGTGCACGCGCTGCGCCAAGGGCACACCCGCCAAGACCACCTT TGCCATCCTCGGCGGCACCCTCTTCATCCTGGCCGGCCTCCTGTGCATGGTGGCCGTCTCCTGGACCACC AACGACGTGGTGCAGAACTTCTACAACCCGCTGCTGCCCAGCGGCATGAAGTTTGAGATTGGCCAGGCCC TGTACCTGGGCTTCATCTCCTCGTCCCTCTCGCTCATTGGTGGCACCCTGCTTTGCCTGTCCTGCCAGGA CGAGGCACCCTACAGGCCCTACCAGGCCCCGCCCAGGGCCACCACGACCACTGCAAACACCGCACCTGCC TACCAGCCACCAGCTGCCTACAAAGACAATCGGGCCCCCTCAGTGACCTCGGCCACGCACAGCGGGTACA GGCTGAACGACTACGTG ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT ACAAGGATGACGACGATAAGGTTTAA

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Protein Sequence:

>RC219687 representing NM_144492
Red=Cloning site Green=Tags(s)

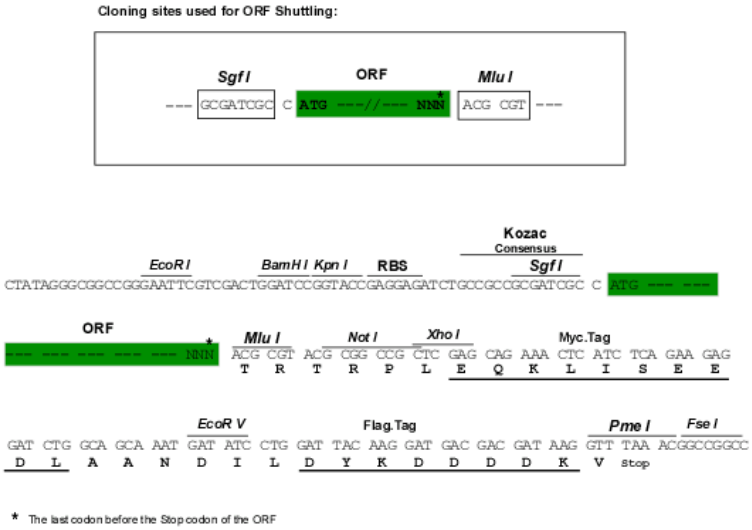
MASTAVQLLGFLLSFLGMVGTLITTILPHWRRTAHVGTNILTAVSYLKGLWMECVWHSTGIYQCQIYRSL
LALPQDLQAARALMVISCLLSGIACACAVIGMKCTRCAKGTPAKTTFAILGGTLFILAGLLCMVAVSWTT
NDVVQNFYNPLLPSGMKFEIGQALYLGFISSSLSLIGGTLLCLSCQDEAPYRPYQAPPRATTTTANTAPA
YQPPAAYKDNRAPSVTSATHSGYRLNDYV

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk8074_g07.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_144492

ORF Size: 717 bp

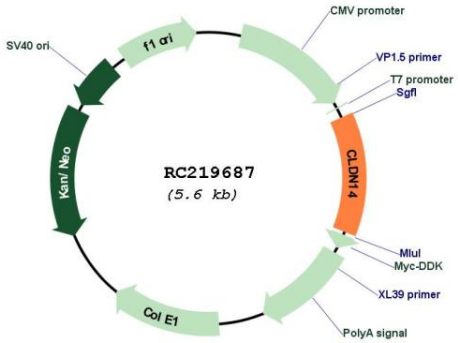
OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially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

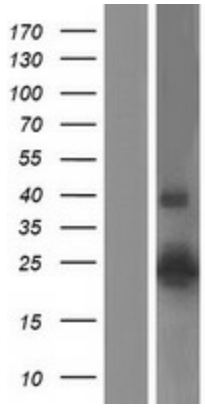
Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

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.
Note:	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
RefSeq:	NM_144492.3
RefSeq Size:	1942 bp
RefSeq ORF:	720 bp
Locus ID:	23562
UniProt ID:	O95500
Cytogenetics:	21q22.13
Protein Families:	Druggable Genome, Transmembrane
Protein Pathways:	Cell adhesion molecules (CAMs), Leukocyte transendothelial migration, Tight junction
MW:	25.5 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. The protein encoded by this gene, a member of the claudin family, is an integral membrane protein and a component of tight junction strands. The encoded protein also binds specifically to the WW domain of Yes-associated protein. Defects in this gene are the cause of an autosomal recessive form of nonsyndromic sensorineural deafness. It is also reported that four synonymous variants in this gene are associated with kidney stones and reduced bone mineral density. Several transcript variants encoding the same protein have been found for this gene. [provided by RefSeq, Jun 2010]

Product images:



Circular map for RC219687



Western blot validation of overexpression lysate (Cat# [LY431801]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with [RC228773] using transfection reagent MegaTran 2.0 (Cat# [TT210002]).