

Product datasheet for RC221232

Claudin 23 (CLDN23) (NM_194284) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Claudin 23 (CLDN23) (NM_194284) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Claudin 23
Synonyms:	CLDNL; hCG1646163
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC221232 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTGTGAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGCGGACGCCGGTGGTGATGACGCTGGGCATGGTGTGGCGCCCTGCGGGCTCCTGCTCAACCTGACCG
 GCACCCTGGCGCCCGGCTGGCGGCTGGTGAAGGGCTTCTGAACCAGCCAGTGGACGTGGAGTTGTACCA
 GGGCCTGTGGGACATGTGTCGCGAGCAGAGCAGCCGCGAGCGCGAGTGGGCCAGACGGACCAAGTGGGG
 TACTTCGAGGCCAGCCCGTGTGGTGGCGGGCACTCATGGTCACCTCGCTGGCCGCCACGGTCTCTGG
 GGCTTCTGCTGGCGTCGCTGGGCGTGGCTGCTGGCAGGACGAGCCCACTTCGTGCTGGCAGGGCTCTC
 GGGCGTCGTGCTTTCGTGCTGGCCTCCTCGGCCTCATCCCGGTGTCTGGTACAACCACTTCTTGGGG
 GACCGCGACGTGTGCCCGCCCCGGCCAGCCCGGTACGGTGCAGGTGAGCTACAGCCTGGTCTGGGCT
 ACCTGGGCAGCTGCCTCCTGCTGCTGGGCGGCTTCTCGCTGGCGCTCAGCTTCGCGCCCTGGTGCACGA
 GCGTTGTGCGCGCCGCCGAAGGGACCTCCGCGGGGCTCGCCGACGAGCGTCAGCACCATCCAAGTG
 GAGTGGCCCGAGCCCGACCTGGCGCCGCCATCAAGTACTACAGCGACGGCCAGCACCAGCCGCCGCTG
 CCCAGCACCAGCAAGCCCAAGCCCAAGGTGGGTTCCCATGCCGCGGCCGCGGCCCAAGGCCTA
 CACCAACTCGGTGGACGTCCTCGACGGGGAGGGTGGAGTCCCAGGACGCTCCCTCGTGACGACCCAC
 CCCTGCGACAGCTCGCTGCCCTGCGACTCCGACCTC

ACGCGTACGCGGGCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA


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Protein Sequence: >RC221232 protein sequence
 Red=Cloning site Green=Tags(s)

MRTPVVMTLGMVLAPCGLLNL TGT LAPGWRL VKGFLNQPVDEL YQGLWDMCREQSSRERECGQTDQWG
 YFEAQPVLVARALMVTSLAATVLG LLLASLGVRWQDEPNFVLAGL SGVVL FVAGLLGLIPVSWYHFLG
 DRDVL PAPASPVT VQVSYSLVLGYLGSC LLLGGFSLALSFAPWCDERCRRRRKGPSAGPRRSSVSTIQV
 EWPEPDLAPAIKYSDGQHRPPPAQHRKPKPKPKVGFPMRPRPKAYTNSVDVLDGEGWESQDAPSCSTH
 PCDSSLPCDSDL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6441_e01.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_194284

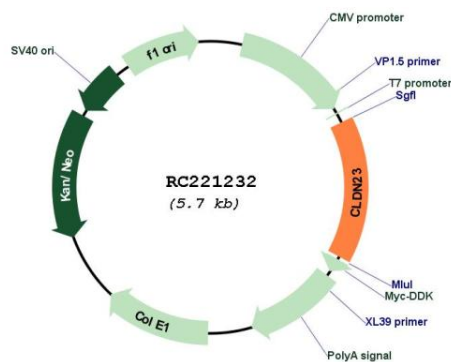
ORF Size: 876 bp

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 or by calling 301.340.3188 option 3 for pricing and delivery.

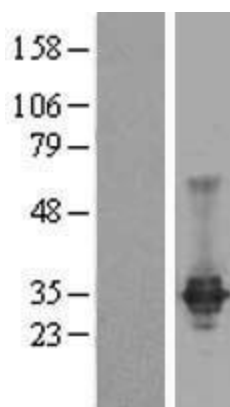
The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in 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:	<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_194284.3
RefSeq Size:	1972 bp
RefSeq ORF:	879 bp
Locus ID:	137075
UniProt ID:	Q96B33
Cytogenetics:	8p23.1
Protein Pathways:	Cell adhesion molecules (CAMs), Leukocyte transendothelial migration, Tight junction
MW:	31.9 kDa
Gene Summary:	<p>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 expressed in germinal center B-cells, placenta and stomach as well as in colon tumor. This gene is down-regulated in intestinal type gastric cancer. [provided by RefSeq, Aug 2010]</p>

Product images:



Circular map for RC221232



Western blot validation of overexpression lysate (Cat# [LY405122]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC221232 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).