

## Product datasheet for RC225263

### Claudin 22 (CLDN22) (NM\_001111319) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Claudin 22 (CLDN22) (NM_001111319) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Claudin 22
Synonyms:	CLDN21
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC225263 representing NM_001111319 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC

ATGGCTTTAGTATTTAGAACTGTAGCTCAACTAGCTGGAGTTTCATTATCTTTGCTGGGATGGGTTTTATCCTGTCTTACAACTACCTGCCACACTGGAAGAACCTCAACCTGGACTTAAATGAAATGGAAAACCTGGACCATGGGACTCTGGCAAACCTGTGTCATCCAAGAGGAAGTGGGGATGCAATGCAAGGACTTTGACTCCTTCCTGGCTTTGCCTGCTGAACTCAGGGTCTCCAGGATCTTAATGTTTCTGTCAAATGGGCTGGGATTTCTGGCCTGCTGGTCTCTGGGTTTGGCCTGGACTGTTTGAGAATTGGAGAGAGTCAGAGAGATCTCAAGAGCCGACTGCTGATCCTGGGAGGAATTCGTCTGGGCCCTCGGGAGTCACAGCCCTGGTTCCCGTCTCTGGGTTGCCACAAGACGGTTTCAGGAGTTCTGGGATGAGAACGTCCCAGACTTTGTCCCCAGGTGGGAGTTTGGGGAGGCCCTGTTTCTGGGCTGGTTTCTCTTCTGCTAGGAGGGTGTCTGCTCCACTGTGCAGCTGCTCCAGCCACGCTCCCCTAGCTTCGGGCCACTACGCAGTGGCACAACACAAGATCATCATCAAGAACTGGAGACGAGAAACCAACCTGAAACAC

ACGCGTACGCGGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCTGGATTACAAGGATGACGACGATAAGGTTTAA



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**Protein Sequence:** >RC225263 representing NM\_001111319  
Red=Cloning site Green=Tags(s)

MALVFRTVAQLAGVSL SLLGWVLSCLTNYLPHWKNLNLDLNEMENWTMGLWQTCVIQEEVGMQCKDFDSF  
 LALPAELRVSRILMFLSNLGFLLVSGFGLDCLRIGESQDLKRRLILGGILSWASGVTALVPVSWV  
 AHKTVQEFWDENVPDFVPRWEFGEALFLGWFAGLSLLGGCLLHCAACSSHAPLASGHYAVAQTQDHHQE  
 LETRNTNLKH

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk8006\\_a11.zip](https://cdn.origene.com/chromatograms/mk8006_a11.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_001111319

**ORF Size:** 660 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\\_001111319.3](#)

**RefSeq ORF:** 663 bp

**Locus ID:** 53842

**UniProt ID:** [Q8N7P3](#)

**Cytogenetics:** 4q35.1

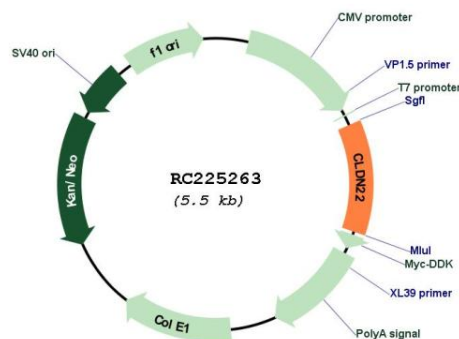
**Protein Families:** Transmembrane

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

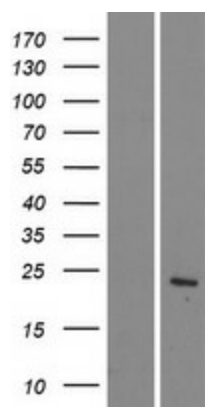
**MW:** 24.3 kDa

**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 overlaps the 3' UTR of the WWC2 gene (GeneID: 80014) on the opposite strand. [provided by RefSeq, Aug 2010]

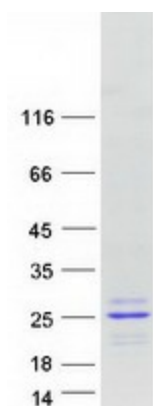
### Product images:



Circular map for RC225263



Western blot validation of overexpression lysate (Cat# [LY426365]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC225263 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified CLDN22 protein (Cat# [TP325263]). The protein was produced from HEK293T cells transfected with CLDN22 cDNA clone (Cat# RC225263) using MegaTran 2.0 (Cat# [TT210002]).