

Product datasheet for RC204199

Claudin 2 (CLDN2) (NM 020384) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: Claudin 2 (CLDN2) (NM_020384) Human Tagged ORF Clone

Tag: Myc-DDK
Symbol: Claudin 2
Synonyms: OAZON
Mammalian Cell Neomycin

Selection:

Vector:pCMV6-Entry (PS100001)E. coli Selection:Kanamycin (25 ug/mL)

ORF Nucleotide >RC204199 ORF sequence

Sequence: Red=Cloning site Blue=ORF Green=Tags(s)

 ${\tt TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC}$

GCCGCGATCGCC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATTACAAGGATGACGACGATAAGGTTTAA



OriGene Technologies, Inc. 9620 Medical Center Drive, Ste 200

CN: techsupport@origene.cn

Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com **Protein Sequence:** >RC204199 protein sequence

Red=Cloning site Green=Tags(s)

MASLGLQLVGYILGLLGTLVAMLLPSWKTSSYVGASIVTAVGFSKGLWMECATHSTGITQCDIYSTL LGLPADIQAAQAMMVTSSAISSLACIISVVGMRCTVFCQESRAKDRVAVAGGVFFILGGLLGFIPVAWNL HGILRDFYSPLVPDSMKFEIGEALYLGIISSLFSLIAGIILCFSCSSQRNRSNYYDAYQAQPLATRSSPR PGQPPKVKSEFNSYSLTGYV

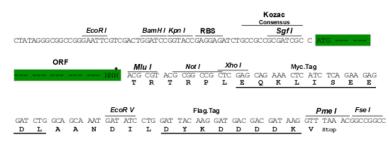
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6060 d07.zip

Restriction Sites: Sgfl-Mlul

Cloning Scheme:





^{*} The last codon before the Stop codon of the ORF

ACCN: NM_020384

ORF Size: 690 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).

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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: <u>NM 020384.4</u>

 RefSeq Size:
 2998 bp

 RefSeq ORF:
 693 bp

 Locus ID:
 9075

 UniProt ID:
 P57739

 Cytogenetics:
 Xq22.3

Protein Families: Transmembrane

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

MW: 24.5 kDa

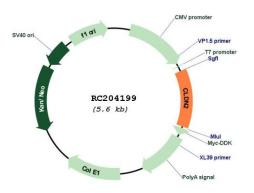
Gene Summary: This gene product belongs to the claudin protein family whose members have been identified

as major integral membrane proteins localized exclusively at tight junctions. Claudins are expressed in an organ-specific manner and regulate tissue-specific physiologic properties of tight junctions. This protein is expressed in the intestine. Alternatively spliced transcript variants with different 5' untranslated region have been found for this gene.[provided by

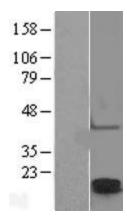
RefSeq, Jan 2010]



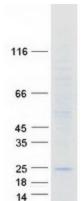
Product images:



Circular map for RC204199



Western blot validation of overexpression lysate (Cat# [LY402780]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC204199 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified CLDN2 protein (Cat# [TP304199]). The protein was produced from HEK293T cells transfected with CLDN2 cDNA clone (Cat# RC204199) using MegaTran 2.0 (Cat# [TT210002]).