

Product datasheet for **RG204199**

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:	TurboGFP
Symbol:	Claudin 2
Synonyms:	OAZON
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG204199 representing NM_020384 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCCTCTCTTGGCCTCCAACCTGTGGGCTACATCCTAGGCCTTCTGGGGCTTTTGGGCACACTGGTTG
CCATGCTGCTCCCAGCTGGAAAACAAGTTCTTATGTCGGTGCCAGCATTGTGACAGCAGTTGGCTTCTC
CAAGGGCCTCTGGATGGAATGTGCCACACAGCACAGGCATCACCCAGTGTGACATCTATAGCACCTT
CTGGGCCTGCCGCTGACATCCAGGCTGCCAGGCCATGATGGTACATCCAGTGAATCTCCTCCCTGG
CCTGCATTATCTCTGTGGTGGGCATGAGATGCACAGTCTTCTGCCAGGAATCCCGAGCCAAGACAGAGT
GGCGGTAGCAGGTGGAGTCTTTTTCATCCTTGGAGGCCTCCTGGGATTCATTCTGTTGCCGTGGAATCTT
CATGGGATCCTACGGGACTTCTACTCACCCTGGTGCCTGACAGCATGAAATTTGAGATTGGAGAGGCTC
TTTACTTGGGCATTATTTCTTCCCTGTTCTCCCTGATAGCTGGAATCATCCTCTGCTTTTCTGCTCATC
CCAGAGAAATCGCTCCAACCTACTACGATGCCTACCAAGCCCAACCTTTGCCACAAGGAGCTCTCCAAGG
CCTGGTCAACCTCCCAAAGTCAAGAGTGAGTTCAATTCCTACAGCCTGACAGGGTATGTG

ACGCGTACGCGGGCCGCTCGAG - GFP Tag - GTTTAA



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Protein Sequence: >RG204199 representing NM_020384
 Red=Cloning site Green=Tags(s)

MASLGLQLVGYILGLLGLLGTLVAMLLPSWKTSSVVGASIVTAVGFSGKGLWMECATHSTGITQCIDIYSTL
 LGLPADIQAAQAMMVTSSAISSLACIISVVGMRCTVFCQESRAKDRVAVAGGVFFILGLLGFIPVAVNWL
 HGILRDFYSPLVPDSMKFEIGEALYLGIISLFLSFIAGIILCFSCSSQRNRSNYYDAYQAQPLATRSPR
 PGQPPKVKSEFNYSYSLTGYY

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



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).

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_020384.4](#)

RefSeq Size: 2959 bp

RefSeq ORF: 693 bp

Locus ID: 9075

UniProt ID: [P57739](#)

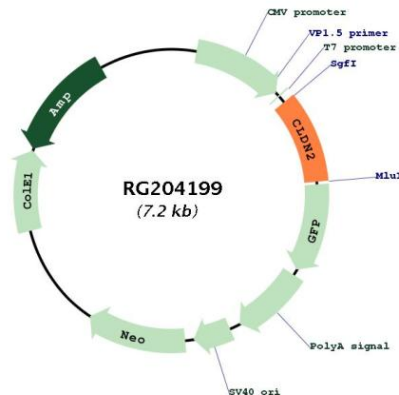
Cytogenetics: Xq22.3

Protein Families: Transmembrane

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

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 RG204199