

Product datasheet for **RG207122**

Claudin 5 (CLDN5) (NM_003277) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Claudin 5 (CLDN5) (NM_003277) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Claudin 5
Synonyms:	AWAL; BEC1; CPETRL1; TMDVCF; TMVCF
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG207122 representing NM_003277 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGGGTCCGCAGCGTTGGAGATCCTGGGCCTGGTGTGCCTGGTGGGCTGGGGGGTCTGATCCTGG
CGTGCGGGCTGCCATGTGGCAGGTGACCGCCTTCCTGGACCACAACATCGTGACGGCGCAGACCACCTG
GAAGGGGCTGTGGATGTCGTGCGTGGTGCAGAGCACCGGGCACATGCAGTGCAAAGTGTACGACTCGGTG
CTGGCTCTGAGCACCGAGGTGCAGGCGGCGGGCGCTCACCGTGAGCGCCGTGCTGCTGGCGTTTCGTTG
CGCTCTTCGTGACCCTGGCGGGCGCAGTGCACCACCTGCGTGGCCCCGGGCCCAAGGCGCGTGT
GGCCCTACGGGAGGCGTCTACCTGTTTTGCGGGCTGCTGGCGCTCGTGCCACTCTGCTGGTTTCGCC
AACATTGTCGTCCGCGAGTTTTACGACCCGTCTGTGCCGTGTCGCAGAAGTACGAGCTGGGCGCAGCGC
TGTACATCGGCTGGGCGGCCACCGCGCTGCTCATGGTAGGCGGCTGCCTCTTGTGCTGCGGCGCCTGGGT
CTGCACCGGCGTCCCGACCTCAGCTTCCCGTGAAGTACTCAGCGCCGCGGGCGGCCACGGCCACCGGC
GACTACGACAAGAAGAACTACGTC

ACGCGTACGCGGGCCGCTCGAG - GFP Tag - GTTTAA



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Protein Sequence: >RG207122 representing NM_003277
 Red=Cloning site Green=Tags(s)

MGSAALEILGLVLCLVGVGGILACGLPMWQVTAFLDHNIVTAQTTWKGLWMSCVVQSTGHMQCKVYDSV
 LALSTEVQAARALTVSAVLLAFVALFVTLAGAQTTCVAPGPAKARVALTGGVLYLFCGLLALVPLCWFA
 NIVVREFYDPSVPVSQKYELGAALYIGWAATALLMVGGLCCGAWVCTGRPDLSPFKVYSAPRRPTATG
 DYDKKNYV

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_003277

ORF Size: 654 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_003277.2](#), [NP_003268.1](#)

RefSeq Size: 1730 bp

RefSeq ORF: 912 bp

Locus ID: 7122

UniProt ID: [O00501](#)

Cytogenetics: 22q11.21

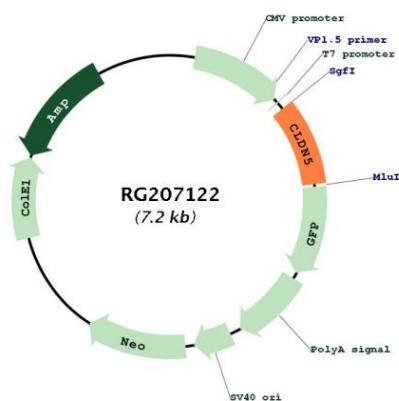
Domains: PMP22_Claudin

Protein Families: Transmembrane

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

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. Mutations in this gene have been found in patients with velocardiofacial syndrome. Alternative splicing results in multiple transcript variants encoding distinct isoforms. [provided by RefSeq, May 2018]

Product images:



Circular map for RG207122