

Product datasheet for **SC118095**

Claudin 5 (CLDN5) (NM_003277) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Claudin 5 (CLDN5) (NM_003277) Human Untagged Clone
Tag:	Tag Free
Symbol:	Claudin 5
Synonyms:	AWAL; BEC1; CPETRL1; TMDVCF; TMVCF
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL5</u>
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	>NCBI ORF sequence for NM_003277, the custom clone sequence may differ by one or more nucleotides

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ATGACCCGCGCACGGATTGGCTGCTTCGGGCCGGGGGGCCGGGCCGGGGGACAGAATCCGCCCCCGAAC
CTTCAAAGAGGGTACCCCCGGCAGGAGCTGGCAGACCCAGGAGGTGCGACAGACCCGGGGCAAACGG
ACTGGGGCCAAGAGCCGGGAGCGCGGGCGCAAAGGCACCAGGGCCCGCCAGGGCGCCGCGCAGCACGGC
CTTGGGGTTCTGCGGGCCTTCGGGTGCGCGTCTCGCCTTAGCCATGGGGTCCGCAGCGTTGGAGATCC
TGGGCCTGGTGTGTGCCTGGTGGGCTGGGGGGTCTGATCCTGGCGTGCGGGCTGCCCATGTGGCAGGT
GACCGCTTCTGGACCACAACATCGTGACGGCGCAGACCACCTGGAAGGGGCTGTGGATGTCGTGCGTG
GTGCAGAGCACCGGGCACATGCAGTGCAAAGTGTACGACTCGGTGCTGGCTCTGAGCACCGAGGTGCAGG
CGGCGCGGGCGCTCACCCTGAGCGCCGTGCTGCTGGCGTTCGTTGCGCTCTTCGTGACCCCTGGCGGGCGC
GCAGTGCACCACCTGCGTGGCCCCGGGCCCGGCAAGGCGCGTGTGGCCCTCACGGGAGGCGTGTCTAC
CTGTTTTGCGGGCTGCTGGCGCTCGTGCCACTCTGCTGGTTCGCCAACATTGTCGTCCGCGAGTTTTACG
ACCCGTCTGTGCCGTGTGCGAGAAGTACGAGCTGGGCGCAGCGCTGTACATCGGCTGGGCGGCCACCGC
GCTGCTCATGGTAGGCGGCTGCCTCTTGTGCTGCGGGCGCTGGGTCTGCACCGCCGTCCCGACCTCAGC
TTCCCCGTGAAGTACTCAGCGCCGCGGGGCCACGGCCACCGGCGACTACGACAAGAAGAACTACGTCT
GA
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5' Read Nucleotide Sequence:

>OriGene 5' read for NM_003277 unedited
 GTGGATTTTGTAAATACGATTTACTATAGGGCGGCCCGGATTTCGGCACGAGGCGCGTCTC
 GCCTCTAGCCATGGGGTCCGCAGCGTTGGAGATCCTGGGCCTGGTGTGTGCCTGGTGGG
 CTGGGGGGGTCTGATCCTGGCGTGC GGCTGCCATGTGGCAGGTGACCGCCTTCTGGA
 CCACAACATCGTGACGGCGCAGACCACCTGTTAAGGGGCTGTGGATGTCGTGCGTGGTGC
 AGAGCACCGGGCACATGCAGTGCAAAGTGTACGACTCGGTGCTGGCTCTGAGCACCGAGG
 TGCAGGCGGGCGGGGCGCTCACCGTGAGCGCCGTGCTGCTGGCGTTCGTTGCGCTCTTCG
 TGACCCTGGCGGGCGCGCAGTGCAACACCTGCGTGGCCCCGGGCCCGCCAAGGCGCGTG
 TGGCCCTCACGGGAGGCGTGCTCTACCTGTTTTGCGGGTGTGCGCGCTCGTGCCACTCT
 GCTGGTTCGCAACATTGTCGTCCGCGAGTTTTACGACCCGTCTGTGCCCGTGTGCGAGA
 AGTACGAGCTGGGCGCAGCGCTGTACATCGGCTGGGCGGCCACCGCGCTGCTCATGGTAG
 GCGGCTGCCTCTGTGCTGCGGCGCTGGGTCTGCACCGCCGTCGCGACCTCAGCTTCC
 CCGTGAAGTACTCAGCGCCGCGGGCCACGGCCACCGCGACTACGACAAGAAGAACT
 ACGTCTGAGGGCGCTGGCACCGCCGNGCCCTCTGCCAGCCACGCCTGCGAAGCCGTT
 GGATAAGCCTTGGGATCCCCGCATGAACCGCGGCTTCGCGGTTACCGCGGCCCAAGC
 TCTTCGAACGTCCGGTCTGCGCCCCACGCGCTTCGGAACCCCTCTGCCTGCCCCGATT
 GACCTTCTGCCT

3' Read Nucleotide Sequence:

>OriGene 3' read for NM_003277 unedited
 GCACCTCCAGGGCCAGGNANAGCACTGGGGAGGGGTCACAGGGTAGCCACCCGGGATCTG
 TTCAGGAAACAGCTATGACCGCGCCGCAATCTAGAGTCGAGTTTTTTTTTTTTTTTTTTT
 GAGAGTTCAAACATTTACTAAGCAGATTCTTAGCCTTCCCACTCCCGCCCTCTCTCAAG
 CTCGGTGCACCAAGCCTTGCCTGGGAGATGCTGGAGTGAGACCGGGAGGTCCAGGCC
 AAGTCACTGGTCCCTGGGCTCGGGCCCTGCCGATGGAGTAAAGACCAGGTGTACACATCT
 TCCGGTGGGGCCCTGGGCTCTGCATCCGCCCTCCGAAGTCAGCAGGAGCCTCTGGGAA
 GTAAGGCAGCAGCCAAGACCCCCAGCGTCTTGGAGGGGAAGCGAAATCCTCAGTCTGACA
 CCCGCTCTGCCTATGAAACAGCGCCGCGCACAGAAAAGGAAACTTCATTCCGTCTGTTA
 AGGGCAGGGCCGGGCTAGTGGAGGNAAGGTGAGCTGCGGGCGCAGGCAGGAGCGGATCC
 CAGAGCCCGCTCGGGGCGCAAAGCCGACGTTCCGAGGAGCCTGCGCGCCCGCTACCCG
 GGGGAGCCCGGTCCATGCCGGGATCCCCAGGCTTATCCAACGCCTCNCCAGCGTGGG
 CTGGAAAGAGAGGGGCCCGCCCGGGCCCAACGCCCTTAAACGTTATTCTTTGGCCTA
 ATCCCCGGGGGCGGGGCGCCGCGGGCCTTAATCTTTACGGGGAACTGAGAGCGG
 GAAAGGCCGGGTGCAAACCAAGGCGCAAGACAAAAGGCAACCGCCTACATGAGACGAG
 GGGGGGCGCCACCAAAGTAAAGCCTGGGCCCATTTGGTCTTTTGCGAACGGGCC
 AAGAGGGTTGAAAAATTGGCGCAA

Restriction Sites:

NotI-NotI

ACCN:

NM_003277

Insert Size:

1340 bp

OTI Disclaimer:

Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).

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: 1720 bp

RefSeq ORF: 657 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]

Transcript Variant: This variant (2) differs in the 5' UTR, compared to variant 1, and encodes a protein (isoform 1) of 303 aa. A common SNP (rs885985) encodes a stop codon in the 5' coding region and thus, for some haplotypes, translation is predicted to initiate from a downstream AUG to produce a protein of 218 aa (isoform 2).