

Product datasheet for **SC325743**

Claudin 5 (CLDN5) (NM_001130861) Human Untagged Clone

Product data:

Product Type: Expression Plasmids
Product Name: Claudin 5 (CLDN5) (NM_001130861) Human Untagged Clone
Tag: Tag Free
Symbol: Claudin 5
Synonyms: AWAL; BEC1; CPETRL1; TMDVCF; TMVCF
Mammalian Cell Selection: None
Vector: pCMV6-XL4
E. coli Selection: Ampicillin (100 ug/mL)

Fully Sequenced ORF: >OriGene sequence for NM_001130861 edited
AGCTGCCAGAGGCTCTGTGATTGGCTGCGGCACGATGACCCGCGCAGGATTGGCTGCTT
CGGGCCGGGGGGCCGGGCCGGGGGACAGAATCCGCCCCGAACCTTCAAAGAGGGTACC
CCCCGGCAGGAGCTGGCAGACCCAGGAGGTGCGACAGACCCGCGGGGCAAACGGACTGGG
GCCAAGAGCCGGGAGCGCGGGCGCAAAGGCACCAAGGGCCCGCCAGGGCGCCGCGCAGCA
CGGCCTTGGGGTTCGCGGGCCTTCGGGTGCGCGTCTCGCCTCTAGCCATGGGGTCCGC
AGCGTTGGAGATCCTGGGCTGGTGTGCTGCTGGTGGGCTGGGGGGTCTGATCCTGGC
GTGCGGGTGCACATGTGGCAGGTGACCGCCTTCTGGACCACAACATCGTGACGGCGCA
GACCACCTGGAAGGGCTGTGGATGTCGTGCGTGGTGCAGAGCACCGGGCAGTGCAGTG
CAAAGTGTACGACTCGGTGCTGGCTCTGAGCACCGAGGTGCAGGGCGCGGGCGCTCAC
CGTGAGCGCCGTGCTGCTGGCGTTCGTTGCGCTTTCGTGACCCCTGGCGGGCGCGCAGTG
CACCACCTGCGTGGCCCCGGGCCCGCCAAGGCGCGTGTGGCCCTCACGGGAGGCGTGT
CTACCTGTTTTGCGGGTGTGGCGCTCGTGCCACTCTGCTGGTTCGCCAACATTGTCGT
CCGCGAGTTTTACGACCCGTCTGTGCCCGTGTGCGAGAAGTACGAGTGGGCGCAGCGCT
GTACATCGGCTGGGCGGCCACCGCGTGTCTATGGTAGGGCGTGCCTCTTGTGCTGCGG
CGCCTGGGTGTCACCGGCCGTCCCGACCTCAGCTTCCCCGTGAAGTACTCAGCGCCGG
GCGGCCACGGCCACCGGCGACTACGACAAGAAGAACTACGTCTGAGGGCGTGGGCACG
GCCGGGCCCTCTGCCAGCCACGCCTGCGAGGCGTGGATAAGCCTGGGAGCCCCGCA
TGGACCGCGCTTCCGCCGGGTAGCGCGGCGCAGGCTCCTCGGAACGTCCGGCTCTGC
GCCCGACGCGGCTCCTGGATCCGCTCCTGCTGCGCCCGCAGCTGACCTTCTCCTGCCA
CTAGCCCCGCCCTGCCCTTAACAGACGGAATGAAGTTTCTTTTCTGTGCGCGGCGCTGT
TTCCATAGGCAGAGCGGGTGTGACTGAGGATTTGCTTCCCCTCCAAGACGCTGGGGG
TCTTGGCTGCTGCCTTACTTCCCAGAGGCTCCTGCTGACTTCGGAGGGCGGATGCAGAG
CCCAGGGCCCCACCGGAAGATGTGTACAGCTGGTCTTTACTCCATCGGCAGGGCCCCGAG
CCCAGGGACAGTACTTGGCCTGGACCTCCCGGTCTCACTCCAGCATCTCCCCAGGCAA
GGCTTGTGGGCACCGGAGCTTGAGAGAGGGCGGGAGTGGGAAGGCTAAGAATCTGCTTAG
TAAATGGTTTGAACCTCTCAAAAAAAAAAAAAAAAAAAAA



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Restriction Sites:	Please inquire
ACCN:	NM_001130861
Insert Size:	1500 bp
OTI Disclaimer:	<p>Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.</p> <p>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</p>
OTI Annotation:	This TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.
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:	<ol style="list-style-type: none"> 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:	<u>NM_001130861.1</u> , <u>NP_001124333.1</u>
RefSeq Size:	2332 bp
RefSeq ORF:	912 bp
Locus ID:	7122
UniProt ID:	<u>O00501</u>
Cytogenetics:	22q11.21
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 (1) represents the longest transcript and encodes a protein of 303 aa (isoform 1). 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).