

Product datasheet for **SC115525**

Claudin 12 (CLDN12) (NM_012129) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Claudin 12 (CLDN12) (NM_012129) Human Untagged Clone
Tag:	Tag Free
Symbol:	Claudin 12
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL4</u>
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	>OriGene ORF within SC115525 sequence for NM_012129 edited (data generated by NextGen Sequencing) ATGGGCTGTCGGGATGTCCACGCAGCCACAGTCCTTTCTCCTCCTGTGGAATCGCCTCA GTAGCAGGCTCTTTGCAGGGACTCTGCTTCCCACTGGAGAAAATTACGATTGATCACA TTCAACAGAAACGAGAAGAACCTGACTGTTTACACAGGCCTGTGGGTGAAATGTGCCCGG TATGACGGGAGCAGTGACTGCCTGATGTACGACACTACTTGGTACTCATCAGTTGACCAG CTGGACCTGCGTGTCTCCAGTTTGCCCTACCCCTCAGCATGCTGATCGCCATGGGTGCC CTGCTGCTCTGCCTGATTGGAATGTGCAACACTGCCTTCAGGTCCTCGGTGCCAACATC AAACTGGCCAAGTGTCTGGTCAATAGTGCAGGTTGCCACCTGGTGGCTGGGCTGCTATTT TTCCTGGCAGGTACTGTGAGCCTCTCCCATCTATCTGGGTCATCTTTTATAACATCCAT CTGAACAAGAAGTTTGAGCCAGTCTTTTCATTTGACTATGCAGTGTATGCACTATTGCT AGTGCTGGGGCCTGTTTATGACTTCCCTTATACTATTTATTTGGTATTGTACATGCAAA TCTTTGCCTTCTCCTTTCTGGCAACCATTGTACTCCCATCCACCCAGTATGCATACTTAC TCACAGCCCTATTGACGACGCTCTCGCCTCTCTGCCATTGAAATTGACATTCCAGTAGTT TCACACACCACTTAA

Clone variation with respect to NM_012129.4



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5' Read Nucleotide Sequence:

>OriGene 5' read for NM_012129 unedited
 TTCACATATTGTATACGACTCATATAGGCGGCCGCGNAATTCGCACGAGGCGCACTTCCT
 GGGACGCTGAGAGGGAGACGCTCCAAGAGGCTCCTCAGTGTGGGCGAGTAAAATGCCCTG
 CGTGTGAGAAGCAGGCTCAGATTATTGCTACTCTGTATTTCAGATCTTCATGTGTCTCTTC
 TAAGCTGAATAAAGCTGTTTTGGAAGTGCAGGTACCTCAAAGCGTAATCTGACTGACAG
 TACTCCACAAGCTTGCCCTGCCATGGGCTGTCGGGATGCCACGCACCCACAGTCCCTTTCC
 TTCCTGTGTGGAATCGCCTCAGTAGCAGGCTCTTTGCAGGGACTCTGCTTCCCACTGG
 AGAAAATTACGATTGATCACATTCAACAGAAACGAGAAGAACCTGACTGTTTACACAGGC
 CTGTGGGTGAAATGTGCCCGGTATGACGGGAGCAGTGACTGCCTGATGTACGACACTACT
 TGGTACTCATCAGTTGACCAGCTGGACCTGCGTGTCTCCAGTTTGCCCTACCCCTCAGC
 ATGCTGATCGCCATGGGTGCCCTGCTGCTGCCTGATTGGAATGTGCAACACTGCCTTC
 AGGTCCTCGTGCCCAACATCAAAGTGGCAAGTGTCTGGTCAATAGTGCAGGTTGCCAC
 CTGGTGGCTGGGCTGCTATTTTTCTGGCAGGACTGTGAGCCTCTCCCTCTATCTGGG
 TCATCTTTTATAACATCCATCTGAACAAGAAGTTTGAGCCAGTCTTTTCATTTGACTATG
 CAGNGTATGCTACTATTGCTAGTGTGGGGCCTGNTTATGACTTCCCTATACTATNTAT
 NTGGTATTGTACATGCCAATCTTTGCCTTCTCCTTTTCTGGCACCATTNGTACTCCATCC
 ACCCATATGCATACTTACTNACAGCCTATNNANNACGCTCTCGCTCTCTGCCATTGAAAT
 GCATNCCAGAN

3' Read Nucleotide Sequence:

>OriGene 3' read for NM_012129 unedited
 CTATGGACCGCGGACCGTCAATCTAGGATCGAGTTTTTTTTTTTTTTTTTTGAAAAAC
 ATCTTTTAATAAACATTATATAAGTACAGCGACACTTTTATTGAGGTTTTACATTGTAGT
 TTACAGCAAATATACTATCCATTGTAGTGTATATGTACAAGTAAAGTAACTTATGTTTG
 TTTTCTCTCCCATGGCTGGATAAACCAAATCTGATACATCCAGATTTAAAGTTGTTTTCC
 AAGTTGGTTTTACCATAAAAGGACTTTAACAATAATAGGCTTTTAATAACATAAAGGTATC
 CCTCCCATCACAATGAGAGCTTGACGAGGGCTCAAAAAGTACTTCAAAAAGTAAATAA
 TTATTTTCTTGGGTGGCTTTAAAAATAGCTACTGATATCAGATCAAAAACACTTAATAA
 AAAATACAATAAGGAAACATCTGTTAGTCTAGTGAATCCACAATAAATACCGATTTGACG
 GCTCTAGATTACAAAAGCCTATGATGCTTATATGAAACGTAATCGGTTATACTTACAATG
 CGGTGACTAAAAAACCGGCTGATATGTTATAAACTGAATCTCCCTTTATAACAACCTTG
 TTTATGCTCGAGTATTACGGGGGTGGGAGATTTTGCATCCCGCATGAATAAACCTCAGC
 AGCTGGGACTGCACTTAATCAACACGCGACAACCCGCTTATGTGCAAATCTACCTCGGC
 GGGCGCTATCAAGAATTAAAGATCAGTTCCTTTGTTAAAAAACGCAAGGATCAAACACCGA
 CGAAATCCGACGCGCTGCATACAAATCAAACCTTATGTGACTTGCCGGGACAGTATAG
 TAAATTATTAACCTTGTTTACTCACGCCGATTAATTTTCGGTGACTTTGTGTAATAAAT
 AACGAATCCGGTAACGAATACCGCAGGATACGCACAAATGCCCGGAGTCTACACCACGG
 GTTACTACCCGTCCTGTCGAGCAGTG

Restriction Sites:

NotI-NotI

ACCN:

NM_012129

Insert Size:

3700 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_012129.2](#), [NP_036261.1](#)

RefSeq Size: 3493 bp

RefSeq ORF: 735 bp

Locus ID: 9069

UniProt ID: [P56749](#)

Cytogenetics: 7q21.13

Protein Families: Transmembrane

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, and also play critical roles in maintaining cell polarity and signal transductions. This gene is expressed in the inner ear and bladder epithelium, and it is over-expressed in colorectal carcinomas. This protein and claudin 2 are critical for vitamin D-dependent Ca²⁺ absorption between enterocytes. Multiple alternatively spliced transcript variants encoding the same protein have been found.[provided by RefSeq, Sep 2011]
Transcript Variant: This variant (3) lacks an exon in the 5' UTR, as compared to variant 1.