

## Specifications:

Gene:	hCLDN5
Accession:	O00501
Insert size:	669bp
Package size:	10µg at 0.2µg/µL

## Description

This shuttle vector contains the complete ORF for the gene of interest, along with a Kozak consensus sequence for optimal translation initiation. It is inserted NotI to AscI. The gene insert is flanked with convenient multiple cloning sites which can be used to easily cut and transfer the gene cassette into your desired expression vector.

## Preparation and Storage

Formulation	cDNA is provided in 10 mM Tris-Cl, pH 8.5
Shipping	Ships at ambient temperature
Stability	1 year from date of receipt when stored at -20°C to -80°C
Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles.

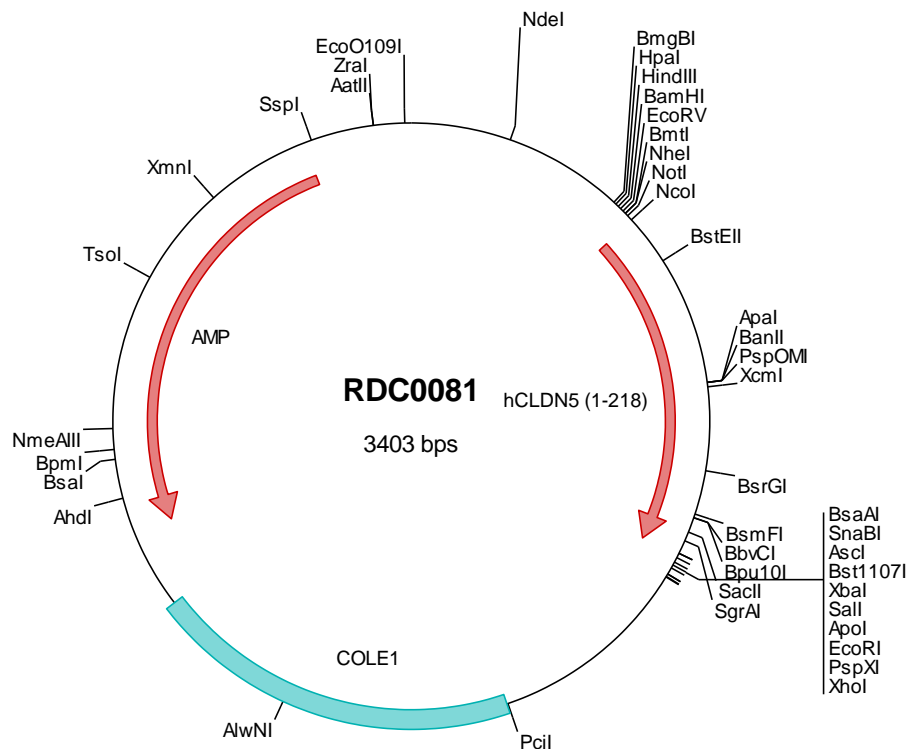
## hCLDN5 cDNA Plasmid

### CLDN5 claudin 5 [ *Homo sapiens* ]

**Also known as:** AWAL; BEC1; TMVCF; CPETRL1

### Summary:

CLDN5 is a tight junction protein expressed in endothelial cells and in some epithelial cells. CLDN5, while expressed weakly in the epithelium, is expressed strongly in endothelium of normal lung and is intense in endothelium in usual interstitial pneumonia. Breaching of endothelial barriers is a key event in the development of pulmonary edema during acute lung injury (ALI). A major irritant in smoke, acrolein can induce ALI possibly by altering CLDN5 expression. Mutations in this gene have been found in patients with velocardiofacial syndrome.



FOR RESEARCH USE ONLY

NOT FOR USE IN HUMANS



> RDC0081 Plasmid DNA Sequence

1 tcgcgcggtt cggatgatgac ggtgaaaacc tetgacacat gcaagctccc gagacggtca cagcttgtct gtaagcggat gccgggagca gacaagcccg
101 tcaggggcgc tcagcgggtg ttggcgggtg tetggggctgg ctttaactatg cggcatcaga gcagattgta ctgagagtgc accatatgcg gttgtaaata
201 ccgcacagat gcgtaaggag aaaataccgc atcaggcgcc attcgccatt caggctgcgc aactgttggg aaggcgatc ggtcgggccc tcttcgctat
301 taacgcagct ggcgaaaggg ggatgtgctg caaggcgatt aagtgggta acgcccagggt ttcccagtc acgacgttgt aaaacgacgg ccagtgaatt
401 ggagacgtgt taacaagctt ggateccgata tetgtagcgc gggccgccacc atggggtccg cagcgttggg gatcctgggc ctgggtgctgt gctgggtggg
501 ctgggggggt ctgatectgg cgtgcggggt gcccattgtg caggtgaccg ccttcctgga ccacaacatc gtgacggcgc agaccacctg gaaggggctg
601 tggatgtcgt gcgtgggtgca gaccaccggg caocatgcagt gaaaagtgtg ogactcgggt ctggctctga gcaccgaggt gcaggcggcg cgggcgctca
701 cegtgcgcgc cgtgctgctg cgtttcgttg cgtctctcgt gaccctggcg ggcgcgcagt gcaccacctg cgtggcccgg ggcccggcca aggcgcgtgt
801 ggccctcaag ggaggcgtgc tctacctgtt ttgcggggctg ctggcgctcg tgccactctg ctgggttcgc aacattgtcg tccgcgagtt ttacgaccog
901 tctgtgcccg tgtcgcagaa gtaagcagctg ggocgacgcg tgtacaatcgg ctgggcggcc acgcgcgtgc tcaatgtagg cggctgcctc ttgtgtgctg
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1101 cgtataaagg gcgcagat actctagagt cgacacccgg ggaattcctc gagcgcctct cctagcttg gcgtaatcat ggcatagct gtttcctgtg
1201 tgaaattggt atccgctcac aattccacac aacatacagc ccggaagcat aaagtgtaaa gcctgggggtg cctaagtagt gagctaactc acattaattg
1301 cgttgcgctc actgcccgcct ttccagtcgg gaaacctgtc gtgcccagct cattaatgaa tcggcccaacg cgccggggaga ggcggtttgc gtattgggcg
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1501 tcagggggata acgagagaaa gaacatgtga gcaaaaaggc agcaaaaaggc caggaaacctg aaaaaggccc cgttgctggc gtttttccat aggtcccgcc
1601 cccctgacga gcatcacaaa aatcgacgct caagtccagc gtggcgaaac ccgacagggc taaaagata ccaggcgttt cccctggaa gctcccctctg
1701 gcgctctcct gttccgaccc tgccgcttac cggataacctg tccgcctttc tcccttcggg aagcgtggcg cttctcaat gctcacgctg taggtatctc
1801 agttcgggtg aggtcgttcc ctccaagctg ggtcgtgtgc acgaaccccc cgttcagccc gaccgcctgc ccttatccgg taactatcgt cttgagtcca
1901 acccggtaag acacgactta tcgccactgg cagcagccac ttgtaacagg attagcagag cgaggtagt aggcgggtgct acagagttct tgaagtgggtg
2001 gcctaactac ggctacacta gaaggacagt atttgggtatc tgccctctgc tgaagccagt taccttcgga aaaagagttg gtactcttg atccggcaaa
2101 caaaccccg ctggtagcgg tggttttttt gtttgcaagc agcagattac gcgcagaaaa aaaggatctc aagaagatcc tttgatcttt tctacggggt
2201 ctgacgctca gtggaacgaa aactcacgtt aagggatttt ggtcatgaga ttatcaaaaa ggatcttcac ctagatcctt ttaaatataa aatgaagttt
2301 taaatcaatc taaagtatat atgagtaaac ttggctgac agttaccaat gcttaatcag tgaggcaact atctcagcga tctgtctatt tcgttcatcc
2401 atagttgctt gactccccgt cgtgtagata actacgatac gggaggcctt accatctggc cccagtgtgc caatgatacc gcgagaccca cgtcaccgg
2501 ctccagatth atcagcaata aaccagccag ccggaagggc cgagcgcaga agtggctcctg caactttatc cgcctccatc cagtctatta attgttgccg
2601 ggaagctaga gtaagtagtt ccgagtttaa tagtttgccg aacgttgggt ccattgctac aggcacgtg gtgtcaagct cgtcgtttgg tatggcttca
2701 ttcagctccg gttcccaacg atcaaggcga gttacatgat cccccatggt gtgcaaaaaa gcggtagct ccttcggtcc tccgatcgtt gtacagaata
2801 agttggccgc agtgttatca ctcatgtgta tggcagcact gcataattct ctactgtca tgccatccgt aagatgcttt tctgtgactg gtgagtactc
2901 aaccaagtca ttctgagaat agtgtatgc gcgaccgagt tgctcttccc cgcgctcaat accggataat accgcgccac atagcagaac tttaaaagtg
3001 ctcatcattg gaaaaagctt ttcggggcga aaactctcaa ggatectacc gctgttgaga tccagttcga tgtaaccac tcgtgacccc aactgatctt
3101 cagcatcttt tactttcacc agcgtttctg ggtgagcaaa aacaggaagg caaaatgccg caaaaaggg aataagggcg acacggaaat gttgaatact
3201 catactcttc ctttttcaat attattgaag catttatcag gttattgtc tcatgacgg atacatattt gaattgattt agaaaaataa acaaataggg
3301 gttccgcgca catttccccg aaaagtcca cctgacgtct aagaaaccat tattatcatg acattaacct ataaaaatag gcgtatcacg aggcctcttc
3401 gtc

> RDC0081 Translated Insert Sequence

1 mgsaaaleilg lvlclvvgwg lilacglpmw qvtafldhni vtaqttwkgl wmscvvqstg hmqckvydsv lalstevqaa raltvsavll afvalfvvla
101 gaqcttcvav gpakarvalt ggvlylfcgl lalvplcwfa nivvrefydp svpvsqkyel gaalyigwaa tallmvggcl lccgawvctg rpdlsfpvky
201 saprrptatg dydkknyv