

## Product datasheet for MC202457

### Cldn5 (NM\_013805) Mouse Untagged Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** Cldn5 (NM\_013805) Mouse Untagged Clone  
**Tag:** Tag Free  
**Symbol:** Cldn5  
**Synonyms:** AI854493; MBEC1; Tmvc; Tmvcf  
**Mammalian Cell Selection:** Neomycin  
**Vector:** PCMV6-Kan/Neo (PCMV6KN)  
**E. coli Selection:** Kanamycin (25 ug/mL)

**Fully Sequenced ORF:** >BC083341 sequence for NM\_013805  
 GTTAAACCTCCTTCTGCTCCAGGACTGGAGGCTCCAGAGCAGAGGCCACAGAATCAATCCCAGCTC  
 CCAGCCTAAGCAGCGCAGAGAGCACCCGGAGGCCCAAGGGCCGTCGGGTGAGCATTGACTTTAGCCA  
 TGGGGTCTGCAGCGTTGAAATTCTGGGTCTGGTCTGTCTGGTAGGATGGGTGGGCTTGATCCTGGC  
 GTGTGGGCTGCCATGTGGCAGGTGACTGCCTTCTGGACCACAACATCGTGACGGCGCAGACGACTTGG  
 AAGGGGCTGTGGATGTCGTGCGTGGTGCAGAGTACCGGGCACATGCAGTGCAAGGTGATGAATCTGTGC  
 TGGCGCTGAGTGCGGAGGTGCAGGCAGCTCGGGCACTCACCGTGGGCGCTGTGCTGCTGGCGCTGGTGGC  
 ACTCTTTGTTACCTTGACCGGCGCTCAGTGCACCACCTGCGTGGCCCCGGGCCAGTTAAGGCACGGGTA  
 GCACTCACGGGAGGAGCGCTTTACGCGGTGTGCGGGCTGTGGCACTCGTGCCGCTCTGCTGGTTCCGCA  
 ACATCGTTGTCCGCGAGTTCTATGATCCGACGGTGGCGGTGTACAGAAGTACGAGCTGGGCGGGCGCT  
 GTACATCGGCTGGGCGGCTCCGCACTGCTCATGTGCGGTGGCGGCTCGTGTGTTGCGGCGCTGGGTC  
 TGCACCGGGCGCCTGAGTTCAGCTTCCCGGTCAAGTACTCTGCGCCGCGGCGGCCACGGCCAATGGCG  
 ATTACGACAAGAAGAACTATGTCTAAGGGCGGGAGGCATGGCGGGGCTCTTCCCAGCTAAGCCCAGCA  
 TGGGAAAGACCGATGCGGGAAGCCGTGTGTGGATGACGACCACCGCTGGGTTGCGCAGCGCAAGTCATGC  
 TGGGTTCCGGCCAGACTTGCCCGCTCTCAGAGTCCGTTGACCATCACTAGCCGGGCCCTGCTCAGAACAG  
 ACTACAGGCACTTTTAAGAACTTGACCGACCTTTCTTCTATGCGCAGTTGGCCACGACGTGGGTGGAAC  
 GCTCAGATTTTCATCGGTGAAGTAGGCACCAAACCTGCCGGAACAGTTCCTACTGAGATCCTGGGGGCACT  
 AGATGCTGCCTTAATGTCCAGTGGCACCTGCTAACCTGAAAGGGCAGCTGGAGAAACCCCGGGGCTGCCA  
 GAGGGAGTGTAAAAAGGGCATTCTTTGTTAGTGGAGAAGAACTACTGAACCAAGGACTTAGCCCT  
 GGACCTGGTCTCACTCCAGCACTCCCCAAGGTGGGGCCCTGTAGGTACCAAGACCTTAGAGGGTGTGC  
 CTTCTCTGGAAGCTTGGGGCTTGGGGGTGGGCGGGCAAGAATTTGCTCAGTAAATGGTTTGAACAC  
 TTTAAAAAAAAAAAAAAAAAAAAAAAAAAAA

**Restriction Sites:** AscI-NotI  
**ACCN:** NM\_013805  
**Insert Size:** 657 bp



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**OTI Disclaimer:** 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](mailto:custsupport@origene.com) or by calling 301.340.3188 option 3 for pricing and delivery.

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](#)

**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:** [BC083341](#), [AAH83341](#)

**RefSeq Size:** 1428 bp

**RefSeq ORF:** 657 bp

**Locus ID:** 12741

**UniProt ID:** [O54942](#)

**Cytogenetics:** 16 11.63 cM

**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. The protein encoded by this gene is a critical component of endothelial tight junctions that control pericellular permeability. The knockout mice lacking this gene died within 10 h of birth and the blood-brain barrier in these mice against small molecules was selectively affected. This gene is expressed strongly in endothelium of normal lung and plays a regulation role during acrolein-induced acute lung injury. [provided by RefSeq, Aug 2010]